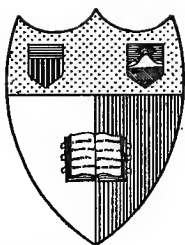


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EDUCATION THROUGH MUSIC

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EDUCATION THROUGH MUSIC

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EDUCATION THROUGH MUSIC

CHAPTER I

PRINCIPLES OF TEACHING

ABOUT one per cent of our population has a formal education beyond the age of fourteen.* The musical instruction that is given during this period is for most people all the training that they ever receive in the subject. Hence it is of the utmost importance that the little time given to music should be spent in the most effective way. This requires a consideration not merely of the musical ends to be reached, but of the capacity of the pupil and his musical needs, involving a cultivation of the desire for the beautiful in music, and direction for its gratification under the social conditions in which he lives. Such a broad view of the subject demands that sound principles be followed and that a rational plan of presentation be employed. It

* In 1905-'06 the number of children registered as attending public high schools in the country at large was eighty-eight hundredths of one per cent of the total population; or, including the children studying at private secondary schools, over one per cent of the population was taking secondary education. David Snedden, *Charities and the Commons*. April 25, 1907.

may be of help if at the outset the principles upon which the instruction is based be formulated, and the necessity for a plan of teaching presented.

It is not always easy to differentiate between a method employed, which is the way a thing is done, and the principle that it is intended to follow, which is a general rule of procedure constantly needing common sense for its application.

No one way of procedure is the right way under all conditions; but the principles that underlie the application should have stability. Without this, the goal cannot be reached. The principles are few and explicit; they are the result of the experiences of many, and of the application of physiological-psychological laws. The actual method pursued, however, will be determined by the character of the students and the conditions under which the work is done. A principle requires a way, in other words, a method, for its expression, but the wise teacher knows very well that to confuse the two is to crystallize the method, from which it is but a step to dogmatism and stagnation. Hence one is constantly testing principles in order to separate the method useful only in a given case from that which is always applicable.

The principles that have controlled the presentation in the following chapters are:

- (1) Experience should precede formal instruction.
- (2) Where it is lacking, the teacher should supply the experience necessary as a basis for instruction.
- (3) The teacher should organize this experience, so that,

while a particular effect is observed and studied, its relation to the total effect shall not be lost.

(4) The motive or impulse in artistic education lies in the desire of the individual to express himself.

(5) The purpose of education through art is to quicken perception, clarify feeling, and stimulate initiative for the beautiful.

Of the five principles which the book emphasizes, the first demands experience as the prerequisite of all work. The second begins the teaching with management of experience, as for instance, in the rhythmic acting in the first grade, or the chord formation of the sixth, so that all the students in a class, not merely the talented few, shall possess the foundation experience for what is to be taught. The third takes the complex experiences that manifest the subject studied, as in this case music, and breaks them up by means of carefully arranged steps such as acting or picturing. In that way the particular experience, the nature of which the average student would otherwise be unconscious, is observed and felt, and made to form a basis for study, a definite object for notation. From the imitative song singing at the opening of the first grade work to the appreciation of the higher forms, the material has been so arranged that at every stage it shall relate to a definite preceding experience. In this way not simply a memory appeal will be made, but definite ideas developed, so vital, because of their relation to experience, that they can form a foundation for new ideas and through them lead to new experiences. This arrangement of the material with

reference to experience renders it possible for the pupil to make a vital connection with great works of art, by means of which a deeper significance and an enduring worth are given to life.

Thus three of the five principles formulated deal with experience. The fourth is closely allied, for with reference to it the work has been constantly planned so as to insure such self-activity on the part of the individual as shall not be vague nor haphazard, since this would vitiate the ideas to be developed, but definite and systematic. For instance, the child in connection with the song carries on definite activities: he steps to the rhythm; he claps for duration; in speed work he is obliged to grasp the phrase as a whole; later, he follows the separate sentences which make up the thought of the larger form with lines that show their number and relationship. In the creative work of song-making and in writing what he hears, the induced self-activity vitalizes his experience. Finally, the fifth step still views the subject from the pupil's point of view; for it limits the field of study to that knowledge and skill which may be turned to practical use in the experience of the average man.

Turning now to the plan of teaching employed: this consists in presenting the material in topics thoroughly worked out in the logical relationship of their parts and dictated by the experience of the pupil. This requires careful preparation on the part of the teacher.

✓Spontaneity is often looked upon as the one ideal condition of instruction; the teacher is expected to be bub-

bling over with enthusiasm and knowledge, ready to adapt herself to whatever phase of the subject the humor of her pupils may present. Hence the use of the words "plan of instruction" referring to the way the work is presented, and implying that something more than mere knowledge of the subject is necessary for the teacher, has, on some persons, the effect of the traditional red rag. A lesson to such people is like an artistic performance whose death knell is sounded if any regulative element is introduced. Yet, if we accept this conception of teaching as an artistic, rather than a scientific performance, owing to the personal and emotional elements involved, does it follow that there is no technique required for its realization? Not by any means.

An illustration from the field of art is appropriate. There is no doubt that a man like Paderewski enters upon his career with a remarkable natural endowment, but in spite of this he undergoes a rigorous technical training that only an iron will and strong constitution could stand. Yet all this training is simply to enable him to interpret a musical passage to his audience. He practices much in order that he may present something effectively to others. A teacher who should stop simply with the acquisition of the subject, and take no thought as to how it should be interpreted with reference to the needs of the particular class, would be doing the same thing that a Paderewski might who mentally grasped the thought of the composition, and knew just how it should be performed, but did not trouble himself to learn the technique necessary for its

presentation. ✓ In other words, there is a difference between knowledge of a subject and the ability to put it before others. A great many people think that when an individual knows a subject he is prepared to teach it; but from the teaching point of view he is only ready to begin his professional preparation. His peculiar technique, that which justifies his being called a teacher, lies in his ability to impart knowledge.

It is quite possible for a person to have a special gift for imparting knowledge,—a sympathetic appreciation of the needs of the learner, enabling him to become a brilliant teacher after he has learned his subject. But even under these conditions such a person attains his skill, not at once but through the opportunities he meets in teaching.

As soon as he has finished learning his subject, a gifted teacher may give good lessons without any special attention as to how he shall teach; but though he may have had no pedagogical training, the fact that he is gifted in this respect has caused him to observe and learn from his own skilled teachers, so that he really has had professional training, though not of a formal nature. ✓ While it may be true that the teacher, like the artist, is born and not made, it is equally true that, as an artist, he needs professional training. ✓ Those who object to the planning of instruction are really denying the value of professional training for the teacher.

✓ The teacher's training, like that of the artist, has two sides; one the actual doing of the thing,—modeling in clay, painting on canvas, performing at the keyboard, actual

teaching of children; the other, the thought, plan, preparation for action. The fascination that the sketchbooks of great artists, such as Beethoven or Leonardo da Vinci or Hawthorne have for us is that they show how these artists prepared for their work.

The plan stands in the same relation to lessons given, as the sketchbook of the artist does to his masterpiece. The teacher sketches his idea of how the subject should be developed, changes it, emphasizes now one aspect, now another, viewing it in the various lights of different approaches. He attains such a mastery over the presentation that he is able to play with the thing. He has developed a technique far beyond what is necessary: he has gained what the engineer calls a margin of safety. Now he comes to the class, not to reproduce something cut and dried, but to mold the minds before him through the very activity he draws out; like the sculptor who has a clear image he wishes to realize, and yet is open to every inspiration that may come to him as the figure emerges from the clay. The plan does not tie the teacher's hands; it frees them. It gives control of the situation by anticipating various possibilities that may occur. The planbook of the teacher is, then, the sketchbook of the artist. Let me not be misunderstood: I would not lay undue stress upon mere planning of topics to the neglect of such experience as one gets by actual teaching. (Preparation must go hand in hand with execution.) To adapt a famous adage, planning without doing is, like theories without facts, vain; and doing without planning is, like facts without theories, futile.

While the work in the following chapter is presented in the form of stages and steps, implying a connected presentation of the subject under complete topics, they are not necessarily intended to be given in one lesson, but to be treated so connectedly that the whole will form a united impression upon the mind of the pupil. A large proportion of the actual lessons given will be those of review and application. These are left to the good judgment of the teacher. The greatest skill and closest thought is required when a new topic is being first presented. This is the birth of an idea in the pupil's mind. Whether it be deformed and sickly, or compact and healthy, depends largely on its first formation, hence the emphasis on the way the subjects are presented and the absence of directions for review and practice, which would be necessary were the book a manual of teaching and not a presentation of principles.

CHAPTER II

THE MUSICAL IDEA

THE satisfaction derived from music is more dependent on the way the tones are combined and employed than on the tones themselves. The direct stimulus to the senses is of itself entirely inadequate to account for the pleasure music gives.

A visit to a Chinese theater will convince the reader of the truth of this. He will find the acting intelligent, the color scheme effective. When the interpreter by his side translates the poetry it may appeal to him as good; but the music will be "sound and fury, signifying nothing." Ask the interpreter what the music means and he cannot put it into words. But the intelligent Ah Lee or Woo Sing appears to understand and enjoy it. Consider what this fact means. Here we have intelligent men, who in some of their arts are our superiors, listening with enthusiasm to what sounds to us like mere noise. We thus see how little we are affected by an appeal to the senses pure and simple. We do not appreciate Chinese music because we do not understand the principles and ideals that underlie its structure and interpretation.

Of all the arts, music is the least universally comprehen-

sible. Painting and sculpture do not require even to be translated, because the objects on which the ideas of these arts are based are the same throughout the world. Trees, water, sky, and land are similar in Paris and Peking. A statue representing parts of the body put together amiss would be as wrong in one locality as in another. Poetry is translatable because the ideas of which it treats are more or less alike in Asia and America. Human nature is practically the same the world over. However much its manifestations may differ, there is a wonderful similarity of experience. Love and hate, kindness and cruelty, are common to all dwellers on the earth. When the Chinese poet weaves these experiences into a drama, the ideas are intelligible to the Parisian listener. For a good translation can bring the Chinese poet in touch with a foreign audience, and in spite of the difference in style any one may genuinely enjoy the Oriental poet's work. As soon as the barriers of language are removed, the Oriental and the Occidental can look over the dividing walls of custom and civilization and appreciate each other's art.

The reason that music alone of the arts is untranslatable is because the elements of music, tone grouping, and the manner of production by means of which specific musical ideas are expressed, do not exist in nature, but are the product of civilization and custom. Each race has its particular set of musical ideas, and the individual is familiar with them because he is born into them. His mother sings melodies that bring smiles of pleasure to his face or soothe him to sleep. He hears the little songs of his brothers and

sisters. Unconsciously he learns the prevailing idiom of the musical language, and as soon as his faculties permit he begins to imitate and to produce the kind of music prevailing in his region, just as he talks French if he is born in Paris. Hence, when a specific piece of music is heard by those unfamiliar with the musical ideas which the piece embodies, no comprehension can take place. The design is not appreciated; only a more or less pleasing collection of sounds is heard. This is why Oriental music is incomprehensible and untranslatable.

Since ideas lie back of music just as they lie back of language, there is a similarity in the way they are acquired. In learning a language the child first utters incoherent cries and ejaculations; then he begins to use single intelligible words; then he adds more words and forms sentences. So with music; the child's incoherent calls and gurgles give place to definite groups of tones; then he attempts to sing, often with no better success than is attained when he tries to pronounce the words he hears. This learning of the sounds and forms of the music idiom depends, as does his learning of language, on what he hears and on how much he tries to imitate.

But the needs and wants of the child force him along faster in the mother tongue; he is constantly hearing it used, so that he has opportunity to connect the things said, and gains an idea of what is being talked about. If he is to get what he wants and be one with his fellows, he must talk, and talk freely. No such force impels him in music. The only reason a child sings is because he likes to

sing. And many a child does not have much pleasure in singing; often he has not learned to control the throat so that he can sing what he wishes. There are people who cannot even hum an air or tell one tune from another; while, on the other hand, there is the prodigy who plays and even composes before he reaches his teens.

The sensation of pleasure or displeasure that music induces has led to the statement that music appeals directly to the feelings. If this were true, music would be in the same class with perfumes. If a person should smell two unfamiliar odors, unless they were similar to some he already knew, so that he could say one resembled, for example, a rose or violet, he would be unable to describe the difference in such a way as to make it clear either to himself or to others. He could say that the two odors were different and that he liked one and disliked the other, but that would be all. The point is that while at first thought music seems to appeal directly to the feelings, it really does not do so, but reaches the feelings through ideas which deal with definite forms. These ideas relate to plan and arrangement and to the manner of performance, showing that the emotions music awakens result very largely from ideas of structure and interpretation.

If a person had never heard *Dixie* or *Suwannee River*, when the two tunes were played to him he would have different feelings about them; he might like one and dislike the other. But, besides the difference in the degree of pleasure felt, he could point out a number of particulars in which the two differed. Even the average observer

would feel the difference between the swing of *Dixie* and that of *Suwannee River*.

The fact that he could notice unlikenesses in the two tunes would show that there is a difference in the designs of which the tunes are constructed. Such differentiation is also impossible between odors. If all associations connected with the rose and the lily were blotted out, we could only say in comparing their odors that they were different. But if we compare the flowers themselves, we shall find that they present certain ideas. That is, each flower manifests itself in a certain way—the lily through its cup-shaped and the rose through its complex corolla. Our experience in observing the arrangement of petals, the color, the shape and the relationship of parts to a whole has produced the ideas *rose* and *lily*, and we are able to judge whether these ideas are adequately attained or not. So with the two tunes mentioned above. The different relationships of the parts to one another show different designs. We have ideas of them which cause us, if a part be slightly changed, to become conscious not only of the alteration, but of the nature of the effect it produces. These are the ideas of structure.

But there is another class of ideas, those pertaining to interpretation. *Dixie* and *America* might be so played that the listener would say one is jolly, gay, and lively; the other dignified and stately. This sense of difference is caused by the way the tunes are performed. We can imagine *Dixie* played in the solemn style of *America*, and *America* played in the lively way suitable for *Dixie*. But such performances would awaken feelings of incongruity.

We have, then, ideas of how a tune should be performed, ideas arising partly from the nature of the particular tune, and partly from the associations connected with it.

We have perceived how we can describe what we see in a rose or lily. This is due to the fact that the eye is able to recognize the relationship of qualities and parts to the whole. Thus we get not only the idea of the entire rose or lily, but also ideas of the component parts—stem, leaf, petal—that make up the complete idea, percept, or notion. The rose may be faded and dull, or it may be fresh and bright; each of these is a definite idea pertaining to the quality of the flower. The rose may be single or double, its petals may be round or oval; each of these is a definite idea pertaining to the structure of the flower. To be complete, the notion or idea of a flower must be a combination both of ideas of its structure and of ideas of its quality.

Similarly, a piece of music presents not only the ideas of structure and interpretation already referred to, which give the notion of the piece as a whole, but these in turn can be analyzed into a still further group of ideas which we shall term constitutive, because every definite musical theme or motive and its adequate production, includes these essential factors. There are seven of these; four relating to interpretation, and three to structure. The four ideas upon which interpretation is dependent are:

- (1) Quality of tone,
- (2) Quantity or volume of tone,
- (3) Rate of movement,
- (4) Articulation (such as separation or union).

The three ideas essential to structure are:

- (1) Pulsation,
- (2) Duration,
- (3) Pitch.

The capacity to feel the effects of these seven constitutive ideas is essential to the adequate appreciation of music.

In developing the consciousness of these ideas it is necessary to analyze them; but this, while supplying a basis, by no means accomplishes all we wish in education. The true science teacher attempts not only to lead the children to know something of anemones and buttercups, of butterflies and ants, but through this knowledge to strengthen the love for the nature life about them; the true teacher of English not only trains the children to speak and write correctly, but awakens in them a love for good literature. The teacher of physical training likewise aims not only to make the little people stronger, but to inspire in them a pleasure in graceful posture and motion. This aspect, the love for what is taught, while impossible without the knowledge of the subject—for we cannot love what we do not know—does not in all cases necessarily follow knowledge. But music teaching which does not awaken this feeling of delight is a failure.

CHAPTER III

IDEAS AS RELATED TO INTERPRETATION

It is the purpose of this chapter to describe the principles that deal with the way music is performed, that is, with the interpretation of music.

The child with a weak sense of rhythm might play *Dixie*, using a beautiful piano, but exhibiting such a lack of feeling that the performance would awaken irritation; while some street urchin might play the same tune on a Jew's-harp with such individuality in the rendering that we should say with pleasure: "There is a musical youngster." Although both performers presented the same structural form, and that produced on the piano would have great advantage in the quality of tones, we should prefer the Jew's-harp version. Our quest is to know just what it is that gives the preference in this instance to the poorer instrument.

Turn to the analogy of language. Listen to a school-boy reciting the Gettysburg speech and compare his interpretation with the declamation of a finished orator. The words are the same—that is, there is no difference in the structure—but how unlike is the effect! The boy may have the better voice, yet beside the orator, his recitation of the

words is mechanical and full of inflections betraying a lack of comprehension of the thought. The most striking difference between the two recitations is that while the orator brings out the meaning of the language, and causes us to see even more in the words than when we read them ourselves, the schoolboy's awkward presentation obscures rather than illuminates the thought.

It is clear, then, that comprehension of the speech is not communicated simply by the accurate repetition of the words. The orator, a mature man, has had wide experience; he has studied many great speeches and has learned to value them; he has read history and realizes what a powerful influence this particular speech had at a critical period in the life of the nation. All this background enables the orator, through inflection and tone color, to add an emotional value. Our preference for the orator's interpretation of the Gettysburg speech is due, then, to his clear discernment of its thought, and to his power to feel and express its worth. This second element, though often spoken of as emotional and temperamental, is more than this. The boy's delivery may have plenty of emotional color; in fact, the ludicrous character of such performances is very often the result of misplaced or exaggerated emotional effects. The interpretation of the speech is determined by the character and skill of the speaker and the wealth or poverty of his past experience.

Turning now to the two performances of *Dixie*, we see that the preference for the Jew's-harp version instead of that of the piano did not lie in the musical idea presented;

for both gave the same tune; nor in the tone employed, for the poorer tone was preferred; but in the way the idea was presented—its interpretation. The power to interpret is, popularly speaking, due to the inherent musical qualities of the Jew's-harp player. This is but another way of saying that the Jew's-harp player is more richly gifted or that he absorbed a large amount of the musical language in early childhood and often used it as a means of expression. The street urchin could make the gay tune express the emotion he felt, just as the statesman could impress his audience with the force of his own feeling for the speech he was reciting.

The popular notion of the process of musical interpretation is the very reverse of what we have been describing. The emotional element is supposed to come first, leading afterwards to a discernment of the thought. But when we ask what it is that awakens the emotions, unless we say that it is a spontaneous reaction to the sound, as is the sense of smell to the odor, we must admit that the emotions are aroused through ideas. Two steps are involved: first, realization of the structure of the idea presented; and second, appreciation of the significance of this idea or its interpretation, aided by previous musical experience.

This double discernment of the musical idea and its value to us goes on subconsciously, for our fundamental musical understanding, like our grounding in language, takes place so early in childhood that we are not conscious of the processes; we are sensible only of the result. The more musical a person is, the more intuitive will be the

feeling of reaction. How common it is to hear a musician say: "I don't know how I do it; I feel it so." He does not realize that an intuitive reasoning is taking place which makes him perceive one form one way and another form another way. The reason for his feeling how a composition should be interpreted really exists, even though it is hidden from his conscious self, in his musical rationality. If we analyze the performances of musical people, we find that the manner of their interpretation grows in a logical way from the nature of the selection, and it is possible to formulate the laws that underlie the performance of a given work. Because the musician may be unconscious of these laws, it does not follow that they do not control his processes.

What method should be taken to teach the boy to deliver the Gettysburg speech adequately? Some instructors would give a training in gesture and expression of face and body, in the rolling of r's and the emphasizing of final consonants. But such training alone would only add to the ludicrous effect of the recitation and make its inadequacy more prominent.

The true teacher would begin by trying to make the boy so thoroughly understand the thought of what he was repeating that he would see the bearing of each sentence on this thought. Along with this training in the structure of the speech would go a second kind of training—in its interpretation. In order to give the boy the necessary background, the teacher would tell him about Lincoln and the influence growing out of the conditions, which led to the

speech. He would be asked to study other great speakers, and he would gradually, as far as possible for one of his experience, begin to realize the force and beauty of the masterpiece. He would begin to value it.

The same principle should hold true in teaching the effective interpretation of music. The teacher who, without reference to the significance of the ideas in the music, teaches what he calls expression by variation in tempo and emphasis, through these arbitrary changes makes only more obvious the lack of true discernment of the musical idea. A wise teacher will lead the pupil to conceive first what the music means as a whole. Is it a brisk winter song, or does it regret the passing of the flowers? From the thought will be decided the quality of tone to be employed: there must be sustained energy in one, and pensive quality in the other. With the quality will be developed a feeling for the proper quantity: the hilarious winter song must have something of the shout; while the autumn song requires a subdued tone appropriate to the regret it expresses. There will be difference in velocity: skating, or sliding, or snowballing, or the scurrying of snowflakes demands a brisk movement of the music; while the passing away of summer, the disappearance of the flowers, the sleep in the cold ground, and the drizzling rain will be expressed by a slower movement. Furthermore, the articulation will differ: the zigzag motion of the skater or of the snowflake, and abrupt motions of the snowball require an emphasis on the separated or staccato effects; whereas the reverie of the autumn song will utilize sustained and well-connected words

and phrases. Thus, in the attempt to express the central thought the pupil has gradually been made conscious of the means employed to express it. Through realizing their appropriateness in expressing the song, he has become aware of the four constitutive ideas of interpretation, as mentioned in Chapter II.

- (1) Quality of tone,
- (2) Quantity or intensity of tone,
- (3) Rate of movement,
- (4) Articulation (such as separation and union).

It will be readily seen that these interpretative ideas are not applicable unless the structure of the song is appropriate to the sentiment it expresses. But if the song be good the pupil, as he becomes conscious of the interpretative ideas, grows aware of the more subtle structural ideas upon which the interpretation depends. As in the case of the Gettysburg speech, a complete presentation necessitates, in addition to the interpretative and structural ideas, a knowledge of the external associations, such as the subject, style, intention of the composer, and date of composition. This is where the individuality of the interpretative artist finds play. The value of the interpretation will depend on his skill and his appreciation of the composition.

While the average listener is not conscious of the constitutive ideas by means of which interpretative effects are gained, their influence upon the complete interpretation of the work is shown by the unanimous appreciation given a really musical performance.

It is told of an eminent concert pianist that he found his

best critic in an acquaintance who could not even sing or whistle a tune correctly. Any one can easily bring to mind instances of the quickness with which a musically uncultivated audience will respond to a genuinely artistic performance. Though they are not able to give an adequate reason for their preference, the power of the gifted player or singer is instantly felt and is summed up by the word "musical." This shows how universal and how definite are the ideas of interpretation, by means of which such sure verdicts are given even by nonmusical people.

We like the way one person performs a musical work and dislike another's interpretation of the same work, even when the performance by the latter is technically correct, because the interpretation of the first has appealed to the ideal of the beauty contained in the music, while the second interpretation lacked that beauty. Our ideals are the result of our previous musical experience, and beautiful performances make us conscious of them. The awakening of such consciousness is often like a further self-revelation and gives us a rare feeling of exaltation. Hence the importance of developing musical ideas. These will be considered in Chapter IV.

CHAPTER IV

IDEAS AS RELATED TO STRUCTURE

IN marked contrast with the uniformity as regards interpretative ideas stand the ideas of musical structure, of which we shall treat in this chapter. Choice here is by no means so sure and definite. To illustrate this divergence, equally good presentations of two unlike compositions may be taken. Imagine two church choirs which are equally skilled in every way, but of which one gives historic music of the style of *Old Hundred* while the other sings the Gospel Hymn type. Each congregation is pleased with its own music. Now let these churches exchange choirs, while each continues to sing its own selections. The interpretative work will be equally good, but the effect on the audience will be very different. The first congregation will consider the songs of the second, vapid, silly, unchurchly, and impossible of conveying any spiritual meaning; while the second will think the music of the first dull and cold, without power to express spiritual fervor. This difference in preference is evidently not one of interpretation, for the choirs are equal in their ability to render their music effectively. But the content of the two kinds of music is totally different. They express different structural ideas

which appeal, or do not appeal, to the different audiences. The kind of music we like is determined by our immediate environment. Whether we prefer the music hall type, or the work of great masters depends upon which we are in the habit of hearing, unless we are musically gifted and can enter at once into the greater inheritance.

The two recitations of the Gettysburg speech exemplify the importance of interpretation. We realized the necessity for the speaker's appreciation both of the speech and its setting. That he might recite it effectively it was essential for him to be able to value it. But if a speech lacks ideas, no amount of interpretative skill can make it affect us, for there is no vital meaning to express. More important than expression, or form, is the thought itself, or substance. In music, as in language, the idea is of supreme importance. A single tone heard by itself means nothing. Only the few who possess absolute pitch can identify it by name. Before it becomes meaningful it must be built up with other tones into a pattern or design.

We have seen that differences in preference are due to the memory of what we have been accustomed to hear, but there must be something in the structure to which memory can attach. A person who has heard *Dixie* and *The Star Spangled Banner* from childhood would not confuse the two, even though he were not able to state in words the different ideas the two tunes expressed; their difference would be as distinct in the consciousness as the difference between *Barbara Frietchie* and the *Biglow Papers*.

Let us examine the difference in the structural ideas of

the two tunes. This requires us to consider the constitutive ideas of structure that unite in producing their specific effects. First, we can march to one tune, but we should have to waltz if we wished to move with the swing of the other. The grouping and emphasis of tone for the purpose of producing this feeling of pulsation, enabling us to move regularly to the swing of the tune, is technically known as the metrical element of music. The metrical element—for instance, two-four or three-four—can be thought of independently of these tunes. Meters are distinct ideas in themselves, modes of pulsation necessarily used to form a musical structure; but they have significance only as they constitute a definite element of music.

In the second place, we notice as we sing the two tunes that while we can keep a regular movement, the tones through which the pulses are manifested are not of regular length; some are long, even lasting over a pulse, and some are short so that several occur in a single pulse. This variation of the tones as to time duration is not arbitrary, but fits in with the regular pulsation of the metrical relationships, forming with them a rhythmic pattern or design. We find that the two tunes vary decidedly in this respect of duration. These duration values are not invented for these particular tunes; they are part of the inherent relationship in which tones are thought. In themselves they form a distinct group of ideas, but as in the case of pulsation, they gain their significance only when expressed in a given musical passage.

Finally, we have a third grouping of tones, which has to

do entirely with the pitch of the sounds. Here, similarly, we find that the selection of pitches is not arbitrary, but consists of tones related in a definite way to what is called the keynote of the composition—its principal or most important tone. This key relationship is a distinct idea in itself, independent of the two others mentioned; yet, like them, not significant until it is combined with them. Such combination results in a definite piece of music whose type varies according to the way in which the constitutive ideas have been used.

To recapitulate, the complete structural idea of the two tunes, while felt as a sound motion or progress (for we speak of the way music “goes”), takes its definite character in each tune from the three ways in which the ideas constitutive of structure are manifested: *first*, in relation to the regular successions of time, which is expressed by means of pulsations that throb in larger and larger units; *second*, in relation to the relative duration of the tones, which, fitting in with the pulsations, present a definite, rhythmic design; and *third*, in relation to the pitch of the tones, a selection of sounds with reference to a central or key tone, which vary with reference to the direction up or down and to the extent of change in each. These three ways in which tones are grouped unite to form the structure or design of a tune. This design is the idea the composer of the tune intended to represent. We recognize the force and character of the idea long before we analyze it; in fact, analysis into these constitutive ideas might hinder enjoyment at the time.

Disassociation between a musical passage and the spe-

cific idea it expresses cannot take place. All musical passages are specific; every combination of sounds, every tone group that conveys a musical thought can express only that particular tone thought, and it cannot be translated into words. Change any constitutive factor, such as the duration or pitch of any of the tones, and you express something different.

As soon as we realize that every musical form or tone group we hear is itself a concrete musical thought, and is the product of combining the three tone relationships, pitch, duration and pulsation, which are themselves constitutive ideas, we perceive how important it is to hear accurately these relationships. It is true that musical appreciation does not need to break up the tonal movement or progress into these three factors, but it is also true that any indefiniteness in perceiving these relationships must result in indefiniteness on the part of the listener as to the idea expressed.

For this reason the Kindergarten stage of mere sensibility without training in analysis for accurate hearing is inadequate. Yet most of us never advance beyond this childhood stage. Its limitations may be formulated thus: first, experience is narrow, we learn to like few and poor varieties; second, experience lacks intensity, is weak and superficial. Most of us need development and widening of the early experience through opportunities for interpretation, and the making of this experience more sharp and vivid through training in hearing accurately the constitutive ideas.

The importance of directing and guiding musical experience will be seen if we keep in mind these facts: first, that while comparatively few make music, every one who hears it takes part in it to the extent of his enjoyment; second, that the part taken by those who enjoy it is by means of the musical ideas that are presented; and third, that the musical ideas presented would be unintelligible to the hearer unless his previous musical experience had made him familiar with similar ideas. The aim of music teaching in the public school being to give not only technical knowledge to the gifted few, but also a cultural training to the many, the teaching should consist of the experience that will widen and intensify the ideas of musical structure and interpretation, and thus lead to comprehension and enjoyment.

The following chapters suggest a way in which this may be done.

CHAPTER V

HOW IDEAS ARE DEVELOPED THROUGH EXPERIENCE

ONE of the editors of a large metropolitan daily says that while almost all the writers in the office are college men, and that, too, from a university that lays special stress on English work, yet it is practically necessary to teach these men to write after they enter the office. We know that they have had eight years of English in elementary and grammar schools, and four years of secondary school training; that they have specialized in English at college; and that the subject, instead of being divorced from actual life, requires daily practical exercise from childhood. Then, too, we must remember that the schools have almost entirely neglected the oral for the benefit of the written language. In the face of all these facts, the remark of the editor-in-chief that it is necessary to teach college graduates how to write—not academic English, but the common English of every day life—seems strange. This can be accounted for, however, when we take into consideration that, while the true aim of school work is to prepare for life, the immediate aim is the study of such subjects as reading, writing, and arithmetic. The teacher,

with all his energies bent on accomplishing these definite activities, is liable to lose sight of the real end for which the studies are prescribed. Hence, while the children learn to read, write, and cipher, they do so under artificial conditions, and are instructed with a disregard for the application of these activities to living, so that the true aim of all their work—the participation in life—is lost. Therefore, owing to this radical difference in point of view, it is possible for a pupil to study English all his student life, and still be unprepared for the practical demands of newspaper work.

If this is the case in such a study as English, the difficulty is much more apparent in a subject like music, the practical exercise of which is but sporadic and occasional. To this disadvantage must be added the fact that the relation between the thing studied, as scales, chords, and all the complexities of notation, and the vital thing experienced as beautiful music, is difficult to establish even for musically gifted people. One can imagine, therefore, the state of mind of the large majority of the ungifted.

Take the study of harmony. There is hardly any one who is not sensitive to its effects, yet it would be safe to hazard that not one in a hundred of those who write out the exercises of an average harmony book is able to make any practical connection between the knowledge and skill he has gained and his musical experience.

In the vast amount of knowledge that children gain spontaneously before school days begin it is the practical use of what is learned that causes them to absorb it. A

rudimentary notion of current musical ideas has been unconsciously acquired by the average child who enters the first grade. He has picked them up just as he has picked up his mother tongue. If he is born in London, Occidental music sounds familiar to him; if he is born in Tokio, Oriental music.

In order to understand language, the child has need of a great background of language experience whereby, through a series of unconscious comparisons of the sounds he hears, aided by the common points in the circumstances under which they are uttered, and through continual deliberate attempts to imitate the sounds, there gradually and all unconsciously dawn upon him their purpose and the method of using them. Thus he becomes conscious of the idea. In other words, his consciousness of ideas is the result of his attempts to make his experience practical.

The following illustration shows the necessity of applying language forms, such as words, to our experience in order to define ideas and make discrimination possible. A boy, who, on account of brain deficiency, did not imitate sounds, grew to the age of eleven without being able to talk. He acted like an imbecile, did not play with the other children, and expressed hunger and other elemental ideas only through signs, intelligible to no one but his parents. At eleven, the experiment of teaching him by Bell's visible speech was tried. The result was marvelous. The boy caught up with the other children; in fact, he advanced so rapidly that it was necessary to stop teaching him for a time lest his brain be overtaxed. The boy had the ex-

perience, the necessary senses, and evidently the brain capacity, but because of his inability to imitate sounds he had been unable to apply the symbols of language to his experience, and thus was left incapable of developing his ideas.

If we apply to music the thought of the preceding illustration, the first attempts of little children to sing will show how the experience is being acquired from which musical ideas may be developed. In his attempts at song, the child's voice goes up and down in pitch, it produces long and short tones, it occasionally places emphasis, and successive outbursts produce a crude sort of rhythm. But this rambling la-laing, although it contains all the elements of music, and the fond mother may call it singing, cannot be termed music; for it presents no organic material. But let the child repeat a definite rhythm, expressed through tones showing key relationship, and the very fact that he can hold this unit and can keep repeating it shows that his previous, unorganized experience has been organized by means of this particular melodic form. His music at first may consist of this one figure, but soon others form and he shows preferences. He will need to hear but the first strain of *Little Bo Peep* or *Ding Dong Bell* to distinguish it. In other words, he has gone through precisely the same process and has organized and used ideas in connection with these songs just as he did with the words cat and dog. But there is this difference that the child is probably more analytically conscious of the constitutive ideas that combine to form the notions of objects, because

it is easier to think of phenomena presented in space than of those presented in time. In music, pitch, duration, and pulse changes all combined, succeed one another so subtly, as presented in time, that the memory is unable to hold them distinctly enough to permit the mind to compare them. However, the essential thing—their effect as registered in feeling—is just as distinct and definite for *Ding Dong Bell* and *Little Bo Peep* as it is for any visible objects.

Objection may be made to the preceding description as not applicable to the facts presented by extremely musical children. The musical child will produce organized musical effects in the form of melodies with apparently no more preparation than the newly hatched chick requires in order to peck. This means simply that the young inherit strong tendencies to do things which favorable external circumstances promptly set in motion. Because the child produces melody at once, it does not follow that experience and the forming of ideas have not preceded it; but that environment makes available an experience which immensely increases the effectiveness of his own.

Since language ideas are more universally employed than those of music, they are of great assistance in teaching music. By employing songs where language ideas already familiar to the child coincide with the musical ideas, he can be led to the proper musical interpretation. The child, in singing the winter or autumn song described in Chapter III, starts with the thought of the song as a whole, and finds no difficulty in relating to the central thought what he does for quality, quantity, rate, and articulation. Thus,

if we choose an expressive song, and teach the child to sing it so as to bring out its thought, we can easily make him conscious of the reason for employing constitutive ideas, and develop in him an intelligent notion of good interpretation.

On the other hand, what is done with reference to pitch, duration, and pulsation, or the ideas constitutive of structure, is not easily separated and made distinct in the movement of the music. Hence no connection can be made between such a specific act and its effect in the musical impression; consequently no idea can be formed. What is needed to form such ideas is something that will guide the pupil's attention, so that, while he is feeling the swing and go of the music, he can at the same time observe a specific form or act, and notice its influence in the total effect he feels. This will enable the pupil to develop an idea of the specific act or form, so that he not only may learn the symbol that represents it, but also may use both the symbol and the ideas in recognizing or suggesting new form combinations and new ideas.

To aid in accomplishing this end, the work has been divided into four steps: observing, acting, picturing, and notation.

In the first step the child is led to observe that there is something in connection with the structure of the tune that is appropriate to what it expresses. This something may be separated into the three kinds of musical ideas already referred to: (1) the metrical grouping—the succession of pulses; (2) the grouping with reference to tone duration—

long and short sounds; (3) the grouping with reference to pitch—popularly described in terms of space as *up* and *down*.

If the child has observed that there is a difference between the “go” of his slumber song and that of his marching song, we should lead him to discover the nature of this difference by letting him act what he feels—the second step—for there is a natural and intimate correlation between movement and music; they mutually define each other. One might not be able to tell the difference between a tune in three-part and one in four-part meter, but if he tried to move to these, the movement itself would make him conscious of the difference. At the same time, movement with the music does not destroy the consciousness of the tone structure itself. The average listener may not be able to tell what constitutes the differences in tone length and grouping between *Yankee Doodle* and *America* but if he “claps” the sounds as he sings them, by concentrating his attention on what he is doing with his hands, he can, after sufficient trial, realize the metrical difference between these two songs. Thus the step of preliminary observation is made more intensive by combination with action.

When the ideas have become distinct in consciousness as forms of movement, we can define them still further by diagram, making the third step. Strong and weak pulses may be represented by large and small circles, long and short tones by long and short dashes, the idea of up and down by dashes of different elevation. Thus tone ideas

have been translated into movement ideas, and these have been represented pictorially.

In each of these steps the music is being sung while a given tone relationship is being observed by means of action, picturing, etc., so that there is no break between what is felt as music and that which is representing one feature of its structure. We can now pass on to the final step, which is to change the picture of the tone relationships to the notation that represents the same ideas.

Thus the fundamental principle, the connection between what is felt and that which expresses it, is so systematically evolved by means of the four steps of observing, acting, picturing, and writing the symbols that the dullest pupil shall not be left behind.

We must not forget, however, that the act of appreciation itself is one that feels the beauty of all the parts as related to a complete whole; it is a synthetic and not an analytic act. Whenever we study a piece of music we are only preparing ourselves for appreciation. The objection so often made that the study of an art work by drawing attention to its mechanism destroys its imaginative appeal is well taken, for the analysis of a work of art involves a different mental process from its appreciation. One is the scientific attitude, the other the æsthetic. One cannot be substituted for the other. The individual, fully to realize his opportunity, must have the benefit of both methods of approach. One prepares him; the other gives him the fruition.

CHAPTER VI

FIRST YEAR WORK: AWAKENING MUSICAL IDEAS

FIRST STAGE: RHYTHM WORK

IF all the children entering the first year of school could bring the same inheritance of musical talent and the same amount of experience through its exercise, the organization of the music work would be comparatively simple; but, unfortunately, both of these factors vary widely in individuals.

Children in the first year represent perhaps greater variations in musical ability than in any other subject of the curriculum. If music were a study carried on individually, it might still be possible to adjust the work to such widely varying ability, but this subject, unlike all other school activities is too often expressed only collectively. Hence the untalented children affect not only their own work, but also that of the talented.

The ordinary procedure of the school is to start at once with the song. Experience shows that out of a room of thirty pupils, approximately one-sixth catch the air immediately and soon become leaders. One-third manage to mumble along after the leaders and to add something

to the total tone of the room. Another third take still longer to fall in and are quicker in going astray, while one-sixth at first seem hopeless. The visitor listening to such a room will not be aware that the effect of the song is not the result of the total activity of the class; but, as a matter of fact, the real work is done by the few leaders, with a more or less intelligent following of the second group, and the decidedly unintelligent help of the third. The result of such work is to educate most effectively those who are already leaders, to do something for the second class, occasionally to bring up one from the third to the second group, and to do nothing for the remainder, thus making greater rather than less the difference between musical and nonmusical children.

When one considers that music work should be the concerted act of the entire class, and that it is the business of the school so to arrange it that all shall be equally benefited, one must admit that the procedure just described will hardly satisfy the demands of good organization. Instead of appealing merely to those who are musically the most talented, a form of work should be undertaken that will awaken musical thought and expression in the large majority of the class.

Children entering the first year, unaccustomed to school life, are shy, and since they have sung but little they cannot easily discover the singing voice. The act of singing is a comparatively strange one to most children.

But there is a simpler and more primitive form of musical expression, which finds its vent in rhythmical action. Such

expression of musical feeling is not so much by means of voice as by movements,—for instance, walking, marking time with the hand, the foot or the head, swaying the body,—movements all of a simple character thoroughly within the control of the pupils. By selecting some very simple songs like *Hot Cross Buns* or *London Bridge*, *Jack and Jill* or *Little Bo Peep*, we have material in the swing and go of which we can easily interest the children. If the song is such that movement is an idea suggested in it as, for example, a cradle song, a marching song, a wind song, or one of the songs expressive of various occupations, the motion can be made much more suggestive.

But it must be borne in mind that the point of the action is not to dramatize the song. Dramatic activity in connection with singing is prone to lead away from the thought of the musical movement to something more readily suggested by the words, and hence be an element of distraction rather than an aid. The aim is rather to get all the children in the class interested in what is going on, some in the complete song, others in its rhythm, all in musical movement,—not alone in ideas that may be suggested in the text.

This work has no analytical aspect; the children do not know how to tell what they are doing; they simply march, swing or clap in harmony. The teacher will soon discover those who are musically deficient, and a large part of her time will be taken up in bringing these laggards into the rhythmic fold where they can be benefited by the exercises of the class. Such work does not give the kind of musical results that make a favorable impression on visitors and

principals, but it is a much more honest effort toward the ideal of what public school work should be than is the course ordinarily followed, which is to give to those that have and to slight those that have not.

SECOND STAGE: VOICE WORK

After a period varying from three to six weeks, during which the main effort is to unify the class and have the children realize that everyone can do something in the singing hour, the teacher may enter upon the second stage in the organization of the music work. This deals with the tone quality which is based on the principle that the quality of the voice naturally expresses the idea calling it forth. Older persons learn to belie themselves in this respect, but the child's voice responds with a charming frankness to the imaginative or emotional conditions by which he is influenced.

This fact gives us the clue for the first steps in voice training, and at the same time is in harmony with the fundamental principle underlying all the work, i. e., to develop the form as always expressing an idea. Listen to the little girl asking permission from her mother to go out to play, and to the same little girl arguing with her mother after she has been refused. Here we have expressive voice; idea and form are closely related. Give a child such a little song sentence as, "Good morning, my dearest Mamma." Let it be sung and you will probably have a thin, meaningless, coarse or squeaky tone; but awaken in the child the thought of her mother and of how much

she loves her, get her to feel that she is singing good morning to her,—and then let the song be sung again; there will be a magical change in its tone quality.

Such work demands that the song material selected shall have some emotional element. Songs about facts of nature which awaken no feeling in the child, descriptions that are more concerned with the statement of facts than with arousing feeling, are difficult material for voice work. The changing seasons, fall, winter, and spring, bring with them hundreds of apt occasions, from the falling of the leaves to the appearance of the pussy willows, thus furnishing incidents that prove extremely interesting for the time being. A song well chosen in this respect has large expressive possibilities for the voice. Again: the festivities of the year, like the Thanksgiving season, Christmas, Easter, and the patriotic days, give scope for the musical work that makes it possible to awaken an emotional interest sufficiently strong for the most effective tone training.

It must be borne in mind that this response in the child is automatic. The emotional interest is awakened not simply to make the work interesting to the child, but for the effect it has on the voice. This result is obtained by continually drawing his attention to the thought that the voice quality and modulation must be true to what he is uttering. In doing this we are awakening in him a sensitiveness to truth of expression which is fundamental not only to all his appreciation of music but to his intercourse with his fellow beings. Such voice training becomes not simply music work, but one of the basic activities in which

the child must be trained the first year. What should all the school work amount to but to enable the child adequately to express himself? Music, like the other studies, supplies but the necessary facts and means for such expression. In the voice we have a beautiful organ, most delicately adjusted, and through the niceties of its cultivation we can awaken the keenest sensitiveness to the truth of what is expressed and its expression as well.

Every word that the teacher utters should be a good example in this respect. Every answer of the child gives opportunity for training in this true music of life, for language becomes musical as it becomes expressive. The spoken word does not emphasize the vowel tone but draws attention to the consonant; singing reverses this process and draws attention to the vowel. Singing and speaking are therefore mutually helpful. In order to sing intelligently, the niceties of the consonant must be studied in speech; to speak expressively, attention must be given to the vowel tone of song; and back of both these effects, the idea of which these are the means of expression must be real and vivid.

Training in these ideas of interpretation, awakening sensitiveness to the way in which the thing is done should not be limited to songs nor to the singing period. Short phrases and words should be repeated and the children made conscious of the differences to which they have unconsciously been responding. A word like "No," for example, can be made to convey half a dozen shades of meaning, from an absolute refusal to a practical consent,

In this work lies the opportunity for the so-called "monotone," the child who cannot sing, whose difficulty generally is that he is unable to grasp and prolong the vowel. He can be asked to repeat his name as the teacher does, prolonging the vowel and turning it into a singing tone. Two-syllable names can thus be sung on the tones soh, doh, or the tonic dominant, each child standing until he can imitate the teacher's call to the satisfaction of the class. The imitation of whistles and the sounds of nature, as water and wind, gives to the skillful teacher a great variety of opportunity for awakening consciousness of tone in the backward members of her class.

Gradually, from the consideration of tone and its connection with the meaning, attention can be drawn to beautiful tone as significant in itself; but the order of work should always be from the practical expressive use to its use for technical purposes. In singing exercises to vowels, for example, the attempt should be made to have the vowel sound as beautiful as possible. This technical and abstract vowel work, contrary to the practice of many, should follow and reënforce the tone work of the song rather than precede it, as would naturally be done with mature students.

While what has been said applies to the work as a whole with reference to its underlying principle, it will be necessary for the teacher to study each child's voice individually. There will be some children with strident, piercing voices, and others with gruff, chest-tone qualities, very often the result of habits formed while having a cold; then there will be the feeble, undeveloped voices. While the principle

will remain the same, the instruction will vary according to the needs of the pupils.

The practice of suppressing the children's voices in order to attain the so-called sweet tone, while it avoids injuring the voices by strain, leaves them undeveloped and unexpressive, and the tone of the whole room becomes "breathy" and without character. Quantity of tone is as much a part of expression as quality. Children love to shout and to sing loud and it is good for them to do so, but it must be significant and controlled sound, not senseless noise. The teacher need not be afraid of voice strain if the tunes are properly pitched, that is, sufficiently high to avoid the use of the chest tone. The constant tendency of the teacher to judge the pitch of the tune by her own vocal feeling is often misleading. The children's vocal organs are smaller than those of a grown person, and are consequently higher pitched, as the piccolo ranges higher than the flute because it is smaller. Hence unless the teacher is very sure of herself, the pitch of the tunes should be decided by the needs of the class, which may sometimes require the giving of the pitch higher than it is written. Tunes requiring force on low tones should be avoided. But phases of the question that deal with the means of expressive voice, the pitch of tunes, the avoidance of pieces that are unsuitable, and the attention that should be given to the individual qualities of the student, are problems for the teacher. All that the child is asked to do has reference to expressive purpose. By these means pure tone is developed.

THIRD STAGE: PITCH, DURATION, AND PULSE

The second stage in the organization of school work is connected entirely with ideas arising out of the interpretative aspect of music. This aspect, however, cannot be long pursued before it leads back to structural ideas. After a few weeks, therefore, we begin a class of work which has an entirely distinct aim, i. e., to make the pupils gradually conscious not only of the material of expression, but also of the structure of the forms, the interpretation of which they have been studying. This is the third stage in the organization of music work.

Such a song sentence as *Gently Rocks My Light Canoe* can be given. After the song has been sung correctly, it may be repeated, the upper tones being sung a third or an octave higher than they are written. By this means the children discover that the up and down movement of the tones has a good deal to do with the interpretation of the words "gently rocks."



The children quickly grasp the significance in the structure of *Birdie Fly* as compared with *Raindrops Fall*; and the relation of the tune to the words in *Down Come the Autumn Leaves* and *Up Goes My Pretty Kite* is at once felt.





In order to make the contrast more striking, the words and tunes of the last four songs may be exchanged, when the absurdity of trying to express the thought of the ascending kite by the tune of the falling leaves, or the raindrop song by that of *Birdie Fly* will be felt by even the most obtuse member of the class. What makes this difference is a problem that the little children do not take long to solve. Ideas of direction and extent of direction are thus made apparent, and when once clearly observed are acted out, the hand showing by its movements not only the direction of each tone from the preceding, but in a general way the extent of direction. After much practice in this kind of observation of suitable songs, selections may be taken in which the melody is not so baldly expressive of the pitch movement. The idea once gained of tone movement with reference to direction and extent, it is not difficult for the children to apply their powers of observing and acting to the movement of any melody.

But this is only one phase of the musical idea. Now

that attention has been drawn to tone direction, it can easily be turned towards tone duration. Some quickly moving tune like *Yankee Doodle* or a wind song compared with the slow moving tones of a lullaby, will cause the children to observe a difference in movement; they can clap this difference, thus making themselves more distinctly conscious of its nature. This is generally spoken of as "clapping the words." The children are conscious that the speed and movement of the tones are factors in the structure of the tunes which decide their expressive character, that there is something appropriate in the grouping of tones of *See Saw* as compared with *Little Bo Peep* quite apart from the exigencies of the syllables. After the idea is once grasped, through its significance the more abstract idea of variation in tone duration itself can be reached, and children can now clap the words to any tune and be made to observe the tones in their relationship to one another, as long and short, or in their durational value.

We are now ready to observe the most fundamental and at the same time the most abstract element in tone grouping; that which has reference to the pulse or metrical element of tunes. Here the connection between expressive values cannot be made so clear. On the other hand, the phenomenon itself is much more simple. What we wish the children to know, i. e., that there is a steady pulsation running through music, we can make them conscious of by letting them keep step or mark time.

Children have plays that bring out this idea: the various "counting out" games, for instance, such as "Eeny, meeny,

miny, mo," where the metrical grouping depends upon the regular recurring pulse. Perhaps more effective still is to have the class play they are a band. While the musical children carry the air, those who need development of the metrical sense give various drum beats, the little drums marking all the pulses, the larger ones only every other accent, while the largest of all give only the strongest accents. Or if toy instruments can be procured, drums, cymbals, triangles, and tambourines may be used to advantage. Thus the feeling of grouping, the relation of pulses to one another and their regularity, are readily and practically brought home. The children get so interested in such work that the unmusical ones have been observed in process of being coached by the more musical during recess.

The difference between this work and that done at the opening of the school is that in the early work no attempt was made to observe the phenomenon itself. It was merely a means to get the pupils to join in the music. Now we wish to have them notice the effect itself. Mother Goose songs supply good material, especially those in compound or six-eight meter. In these the two large swings that throb through each measure are easily felt and acted. The same grouping of two can be applied to most four-pulse meter, as well as to all two-pulse and many three-pulse meters, especially those that are written for children. The three-part songs may be treated as if they were compound, and acted in the same way as the six-eight song.

It will be noticed from this enumeration that the object

is, not to discover the metrical signature, but simply to make the children conscious of the fundamental swing, like that of a pendulum, which runs through the music. Along with this song work the same principle of observation and acting can be applied to the recitation of Mother Goose rhymes and jingles. Valuable discriminating thought can be awakened by repeating *Jack and Jill* first marking every beat of the foot, then marking only the strong beat, and finally grouping and marking only every other foot.

Poetic rhythm	✓				✓					✓
Third	✓			✓			✓			✓
Second	✓		✓		✓		✓		✓	✓
First	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Jack and Jill went up the hill to fetch a pail of wa-ter.

The children will feel the choppy effect of the first and second ways, and choose the third.

If we examine the illustration of *Jack and Jill* closely, we shall find that there is a still higher rhythm—that which deals with the thought. Like the others, it presents a series of large pulsations, but instead of grouping these pulses mechanically on the basis of the foot, it prolongs or hurries these as the thought may require: for instance, *Jack and Jill* would form the first group; *went up the hill*, the second; and *to fetch a pail of water*, the third. Thus *Jill*, *hill*, and *water* would form the climaxes of these pulse waves. In order to make these of equal proportions, the second group must be uttered a little faster than the first, and the third considerably faster still. Thus three pulses would take the place of four. Thought grouping is of prime importance in serious poetry, where the rhythm is a

helpmeet to the thought, and justifies Professor Scripture's contention with reference to the true nature of poetic rhythm.

The purpose of the work suggested here, however, is to arouse in the average, or those below the average, that feeling of regularity in succession which is the necessary basis of sensitiveness to the truly artistic use of rhythm. The child who is unable to regulate rhythmically his physical movements, such as walking and clapping, will later be pretty sure to find difficulty in extending and compressing the foot in poetry as is essential in order to manifest the true poetic rhythm. As a means of strengthening the sense of recurring pulsation, there is great value in employing jingles such as Mother Goose supplies, where evidently the pleasure consists in the rhythm rather than in the thought expressed. The reason that the majority of people read poetry in a sing-song which disregards the true flow of the lines is because the rhythmic sense is so undeveloped that they rely on the mechanical regularity of the foot to steady them. It is the nonmusical dancer who is most dependent upon uniform tempo in the music; he who is truly musical and has perfect command over himself can readily accelerate or retard his movements to accord with the artistic interpretation of the music.

There can be no more genuine musical training than awakening and making the pupils sensitive to the true pulse in both music and poetry. Some children will find difficulty in catching even the dogtrot of the iambic foot, and it is only by appealing first to the mechanical regular

grouping that they can be taught to vary this as may be needful for the sympathetic rendering of whatever may be the music in hand.

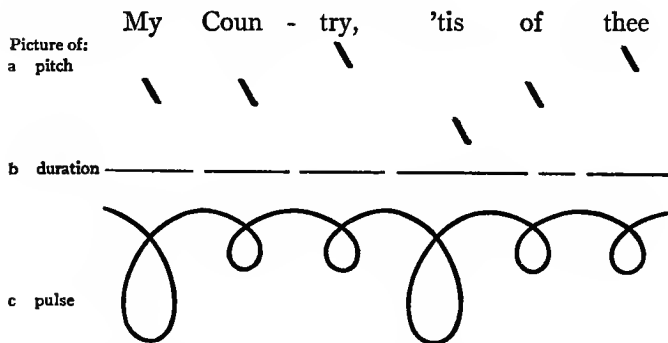
With reference to the three aspects of study here described,—pulsation, duration, and pitch,—it will be observed that we have gone through the first two stages of the process outlined in the preceding chapter, i. e., those of observation and acting. Yet the aim of the work has not been to make the pupils analytically accurate with reference to tone relationship.

The important point was not that the tones moved in seconds or octaves, but in small or large skips; not in halves, quarters, or eighths, but in long or short tones; not in two-part or three-part meter, in four-part or six, but that there was a regular pulsation in all music, which when recognized made it go easily. We have been aiming at fundamental ideas rather than at analysis.

The principle can be similarly carried on to a rather rough and ready picturing of these three effects by using dashes at different heights to represent pitch, dashes of different lengths for duration, and large and small circles for strong and weak pulses.

The idea of musical structure, felt as a “go” or movement, is developed, as we have already shown, through the recognition of tone relationships. The difficulty has always been that when a relationship simple enough to be grasped has been presented, the musical movement for which it exists has been lost. When the child is thinking out how the first three tones of *America* are related to one

another with reference to pulse and pitch, he is pretty sure to forget that they have to do with the design of the tune. On the other hand, when pitch, duration, and stress relationships are presented as materials out of which music is made, as scales and time exercises, only musical pupils are able to make the connection between the material and the structure it forms, or to recognize it in the music they hear. The processes above described start and end with the musical passage, and while they detach by action or picture some one feature of the movement and make it possible for the pupil to develop that phase of the idea, the passage as a whole is being sung or heard at the same time, so that relationship to the whole is never lost.



But the description of pitch differences in terms of space, while serving well enough for the first presentation, is neither accurate nor sufficiently true to experience. We can describe the difference between the octave of a tone and the seventh by saying that the former is a trifle higher, but

the difference in effect is much greater than the distance idea suggests. In other words, various tones, owing to their relation to the key tone, take to themselves certain qualities derived from key feeling. If the pupil is to hear accurately, he must be able to recognize these qualities due to key feeling. In order to do this he must be able to hear them not as effects in the general flow of the melodic movement but associated with the individual tones that produce them. The first step in this recognition is a difficult task for all except musical people. Hence to accomplish it, a device dating back to the eleventh century is employed, i. e., associating the tones with what are called sound names, so that a tone occupying a given place in a key will always be sung by a given name. In this way the key qualities of the tone are gradually associated with the name, and when the tone is heard in its musical relationship, the key feeling suggests the name and thus defines it for the mind; or, when the sign that suggests the name is seen, it so brings to mind the key feeling associated with it that it is possible to think or sing the tone.

It is obvious that in order to use such a device effectively, the singing of these names in connection with the tones as they occur in music, must be practiced, forming the necessary association, and the less musical the pupil the more is this essential. The ordinary way of starting out with these sound names and forcing an association with them entirely from the scale aspect of the tones, makes of the connections a set and artificial grouping. This, although well enough for exercises written for the beginner or for

the scale idea, tends to break down in the free movement of tones as they actually occur in songs, the very time when its help is most required. In other words, the experience which is to form the associations between the tones and their musical qualities is too narrow and artificial.

What is needed to make the device successful is a wider experience for forming a more accurate association. To supply this we very early in the year connect with the simplest song sentences, after they have been thoroughly learned, their sound names. For example, after the child has sung *Gently Rocks My Light Canoe* and has thoroughly learned the expressive qualities of the tones with reference to the idea expressed, the same two tones are sung as *doh,* re*, and he associates these *names* with the key feeling that these tones awaken. This process is kept up through the year, the sound names being used not as is ordinarily done, to suggest the tone required, but—after the tone is learned and its quality is thoroughly in mind, for the sake of connecting these qualities with the names by which we later wish to suggest them.

The sound names, though they have nothing to do with the expressive rendering of the song and hence seem inconsistent with the principles we are following, are, in this case, connected with the tones after their expressive values

* The phonetic spelling used for the syllable names in this work is that employed in Tonic Soh-fa method, with the exception of the syllables for the second, third, and seventh and fourth and fifth sharped of the scale, for which the American spelling of *re*, *mi*, *ti*, *fi*, and *si* is adopted in order to avoid confusion with the usage in this country. The value of the Tonic Soh-fa spelling tending to keep a pure vowel tone, is obvious.

are felt. They are not an aid in the present work, but preparation for more complex work to follow.

It will be observed that the three stages of work so far outlined all grow out of song material and hence imply that actual song singing is the larger part and the most important feature of the work. What has been described with reference to tone relationships has grown out of the song work and is necessary for the organization of the experience. Such observation of song material as has been described follows the song singing after its full expressive value has been developed. Observation that some of the tones are high or low, or long or short follows the learning of the song and awakens new features of interest.

But this is not all. These observations help the child in learning new songs in the latter part of the year. Instead of repeating passages to be taught over and over until there is an automatic memory of them, the child's observational powers are directed by means of the devices used. For instance, in teaching a new song the children are asked at the outset to notice whether the tones go up or down, whether in wide skips or little skips, whether they move rapidly or in long-sustained tones. Thus the process of musical observation is developed and musical passages are quickly grasped. The pupils feel the force of the work done in aiding them to observe how the tones go, and a keen competition is awakened in the exercise of their new powers of tone discrimination. To go on teaching songs through mechanical repetition after the children have begun to observe definite features is like supplying tools

without giving opportunity to use them. They fail to apply what they have learned and miss the exhilaration and interest that this might awaken.

At the end of the first year the pupils should have a keen feeling both for tone quality and for its expressive use in connection with their songs, in other words, for interpretative ideas. Experience has shown that the way the song goes, or its structural idea is due to the grouping of the tones in pulses, with reference to their being long or short and with reference to high or low. And they have formed associations between the tones of their songs and the sound names of these tones, so that when the first and second of the scale are sung, *doh*, *re* come to the mind.

All knowledge gained has been in the form of experience in acting and picturing songs, playing with the material in its constructive aspect without analyzing it. If the work of this year has been successfully carried out, an effective basis of experience has been laid for a more accurate and definite observation of tone as used in the music necessary for the more advanced work of the second year.

CHAPTER VII

SECOND YEAR WORK: DEFINING INTERPRETATIVE AND STRUCTURAL IDEAS

THE first stage deals with the interpretative idea, the expressive use of song; the second individualizes the tone of the key; the third carries the rhythmic thought to the point where notation can be considered, and the fourth introduces the staff. The rest of the year combines this material and adds one distinct feature which also requires the union of all the previous knowledge, that is, the practice of song making.

FIRST STAGE: VOICE WORK

In the first of these four stages, dealing with the interpretative idea, the children learn that songs are expressive. In Chapter V it is stated that the good tone gained in the first year is an automatic response to proper imaginative and emotional conditions. Through constant attention the children not only have been getting experience in effective singing but have also been forming good habits. They are now a year older; the shyness of the first year has disappeared and the change in maturity is greater than in older pupils. They can be made conscious of some of the

simpler technical steps necessary to get good tonal results, and systematic effort can be made to correct tonal faults.

The study of the vowel is now introduced and the children begin to learn that of the various sounds that make up syllables and words, one is chosen for the singing tone while the other sounds come in very quickly before and after as the syllable requires. Take, for instance, the word "My" it consists of three sounds: a humming sound, required by the *m* followed by *a* as in father and *i* as in ill. A good singer makes the first and last quickly while the *a* is the sound on which the word is sung. If the pupils try singing *My Country 'Tis of Thee* they will find that many, instead of singing on the tone *a* go on to the tone *i* and this not only makes the word sound badly, as if it had two syllables, but also requires the making of a singing tone on a sound difficult to sing. The study of the vowel consists first in learning to select the right sound for the singing tone, and, second, how to hold it without changing its quality, at the same time learning to make the sounds that come before and after, not only quickly, but so distinctly that the words will be clearly understood.

Supporting this work and making it effective is the necessity for good position of body and sufficient breath. The relation of pose of body, flexibility of jaw and control of breath to what they are trying to do in tone production is easily made apparent to the children. If the work is done in connection with the song and if the relation of the word to the song is felt, then the relation of the vowel to the word can be carried and both these can be related to the good

position of the body and breath control. Thus all the factors can be coupled with the expressive end they serve. On the other hand, if the breath exercises are taken as independent work at one time, the vowel work in arbitrary exercises at another time, the pronunciation of the words of the song at still another time, and general drill on expressive singing of the song at yet another, we have what too often happens under the so-called systematic teaching of music: all the essentials necessary for effective singing are practiced because their logical importance is felt; but they are so disassociated one from another that little practical use is made of them, hence that which unites them and makes them significant is lost.

Good position of body, breath control, and the nature of the vowel and the consonant are technical elements, of whose place in singing the pupil is gradually made conscious by their employment to attain expressive ends. The first stage of the second year work emphasizes this mastery of means through the ends they serve, which goes on practically through the year in connection with the song singing, the point now aimed at being to make these features so important and vivid to the children that they can be carried along and progress can be made in their successful use through the regular practice of learning songs.

SECOND STAGE: KEY QUALITY

After a few weeks spent on the first stage of work, it is left for that of the second stage,—learning the characteristics of the tones of the key. The tones in the melody are

not like a string of beads all of the same size and color, but their relations in the key give them various qualities so that the scale made up of these tones is really like a spangle of diverse jewels. As the effect of jewels varies according to the light they are in, so the effect of tones varies according to the successions in which they are grouped. It is not difficult to memorize the tones in scale succession, but put these tones into a song and the children find it difficult to recognize them.

The first year's work has given the children a feeling for tones so that they recognize bright or dark tones, restful or active tones, without any attempt either at definition or analysis. They have felt these qualities in the songs they have been singing and an effort has been made to connect the sound names with the feeling of the tones that the song has developed. This has been done by repeating the same little melodies, using instead of words the syllable names, after their character has been fully developed and felt in songs.

The advanced work aims to make the pupils conscious of the qualities so that they will know definitely what key characteristics belong to each tone. Let us illustrate by means of language. The child becomes familiar with the sound "d" through speaking words in which it occurs. For instance, he has often said the word "did" but he has never separated it into the different sounds that make it up. In time he learns the symbol that represents the sound "d" and then he finds this symbol in written words that he already knows, such as "day" or "good." He realizes

after a number of such experiences that the symbol "d" is the mark for a sound with which he has long been familiar in his verbal experience. Hereafter the sound "d" is a separate thing to him and he is consequently aware of it wherever it occurs. It no longer merges in the whole word. The form and the experience have united; consequently an idea is developed.

In music the child has already sung as wholes short musical phrases to the syllable names, and he has felt bright or dark characteristics, or active or reposeful qualities in the different phrases. For instance, in the song sentence, "I'm so gay" he felt the gladness of the whole.



When he broke up the word "day" into its parts he found the peculiar effect that was due to the presence of the sound "d." Now in his singing his attention is drawn to the particular sounds which produce a particular effect. He finds that the peculiar gladness of the phrase "I'm so gay" comes from the sound *soh*, the fifth in the scale. If the reader will sing the passage, ending first on the fourth and afterwards on the sixth (the two tones on either side of the fifth), he will realize that the fifth tone gives the quality which expresses the thought of the word. True, this quality of the fifth is due to what has preceded it so that the characteristics of tones studied in this stage are really effects dependent on a harmonic relationship of which the pupil is only aware in the single tone; here lies the benefit

of this work that, by making the pupils sensitive to the quality of the individual tones, an elementary harmonic feeling is being developed. As the first music the pupils attempt to read is of the most obvious harmonic structure, the descriptions here given hold good to their experience. As skill in reading increases, experience with more complex harmonies grows and a subtle feeling for tone relationship takes the place of this stage. Both the use of the syllable or sound names, and hand signs are for the purpose of impressing on the memory the quality of the tone in the key. Their influence is dependent on the thought they stimulate; when they are constantly used as mnemonics for the memory they may easily come to take the place of thought and thus become a hindrance to musical thinking.

We begin this work by singing to the pupils two little sentences, "I want to stop," and "I want to go," set to almost the same notes except that the first ends with *doh* and the second with *re*.



After we have sung the second, we bid the children sing the first. They sing the words of the first, but generally to the tune of the second, which is, of course, more distinctly in their minds, and resembles the first in every respect but one. "That doesn't sound as if it wanted to stop," we observe. The children shake their heads; they feel that something is wrong. A new idea has been brought to their attention; one tone has a different feeling from another

tone. They have never thought of it before, but there is no escaping from it now. We sing "I want to stop" to them again. Now they have it and hereafter cannot be shaken. "I want to stop" ends on a tone that wants to stop, and they have no doubt about it. That tone, we tell them, is named *doh*, and extending the closed fist, "Here," we say, "we have a picture of it." Similarly we tell them later that the name of the tone that wants to go is *re*, and drive its progressive quality home by picturing it with the palm spread out sloping upward.

We now study the third of the scale, repeating the same two songs, but commencing on *mi*. This gives us the half step above rather than below the initial tone. If the tonic is clearly in mind, the repose quality of the third will come out, and at the same time its sensitive, plaintive character. The open hand well illustrates this tone quality. While the fourth helps bring out the quality of the third, it is not individualized, the whole attention being centered on the similarity and difference between the third and the first—between *mi* and *doh*. This relationship is further tested by the teacher's singing the *doh* in different pitches and asking the children to sing the *mi*. If the pupils have a true idea of *mi*, the reverse step will be possible, though it is much more difficult, i. e., when the teacher sings *mi* in different pitches the children can give the corresponding *doh*.

The next step is to compare the third repose tone with the two already studied. For this the teacher takes the sentence "I'm so gay," given on page 65.

The three tones are now practiced from hand dictation, the lower fifth being easily added as the octave of the upper. It will be best to practice not only reaching the fifth from the tonic and the third, but also the reverse—giving the fifth and having the pupils sing the other two tones. If the fifth has been really learned, when it is sung on different pitches by the teacher it will not be difficult to reach the other tones. Practice and great care will be needed not to have the acquiring of these tones result in merely learning a mechanical formula, but to have it a response to genuine musical thinking.

The next step is to study the tone just below *doh*, using the following sentence:



Emphasis of the word “teasing” will bring out the quality of the seventh—its incisiveness and the demand for resolution upwards. Using the Tonic Soh-fa name, we call it *ti*, and the index finger pointing up pictures it to the eye. This is now practiced with the others in a similar way.

The next tone is studied,—the fourth, *fa*. For this the phrase “so far away” is added to the already familiar “I want to go.”



The dark, unsatisfied quality of the tone is brought out by the song. Its tendency to drop down to *mi* is illustrated by the index finger's pointing down, the opposite of *ti*.

Finally, the last tone *la*, the sixth, is taken below the tonic in the little song, "*I'm so sad.*"

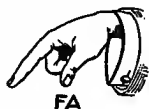


The rather dark quality is brought out by the song. The downward tendency of the tone *la* is indicated by the whole hand pointing down, the opposite of *re*. This position shows its downward tendency from the tonic, while its opposite upward progression towards *doh* is indicated by the wrist's being raised from the *soh* position.

The true test for learning the key qualities of these tones is not the ability to reach them from the tonic, but the ability to form the tonic when the tone is given in different pitches, thus resulting in the ability to think new keys.

Last year's songs and song sentences are sung and the pupils feel that their past ex-

The hand signs are those used by the Tonic Soh-fa teachers. The cuts are taken from *Pocket Modulator*, published by Biglow and Main.



perience in singing the sound names is being supported by their new observations. The advantage of the past experience is that it keeps a pupil from making a too narrow and arbitrary deduction with reference to tone character, which is bound to be contradicted by later experience. For context, harmony, and rhythmic position are constantly changing the effects of tones even in simple melodies, thus making it especially necessary that experience should precede definition.

So we go through the seven notes of the scale, bringing vividly into the child's consciousness the key quality of each tone through song sentences that emphasize its peculiar characteristics and through hand signs that suggest it physically. Thus the beginnings of work made in the previous year, observation, acting, and picturing, are continued. In this work with tone definition the shape of the hand—closed or open, pointed up or down—represents to the eye distinctive qualities of the tone and takes the place of the blackboard picture, for obviously such qualities could not be pictured. All that the blackboard can do is to suggest distance and direction.

Taught in this way the tones interest the children and become so real to them that music can be easily dictated by use of the hand signs. The hand sign suggests the quality of the tone, the raising or lowering of the hand when the sign is made suggests the direction and duration of the interval. Thus we have, combined in one act, three suggestions of tone relationships. The children will sing readily new tunes thus dictated: the ease with which they

follow this dictation makes it possible, by using both hands, to dictate two-part exercises in the second grade, long before they can be sung from notation, showing that the hand signs are the simplest and most accurate way of suggesting tones, with reference both to pitch and rhythm.

In arithmetic, after the child has acquired a certain amount of knowledge about numbers we organize his knowledge for him in the shape of the multiplication table. Similarly we organize the tone knowledge that the child has now acquired by grouping the tones, in the scale, for instance, showing their relative places there. The child's use of the scale is not dissimilar to his use of the multiplication table. The latter is useful to him in most arithmetical operations. So the knowledge of the scale, involving acquaintance with the sequence of the tones in a key, is of use constantly in music. Moreover, the scale is a mode of movement that occurs often in music, like an idiom in language. Beethoven's *Hymn to Joy* in the *Ninth Symphony* moves almost entirely in the stepwise movement of the scale. The fact that the scale is such an idiom is so obvious that it needs no illustration. The child in his experience discovers that the song *Up Goes My Pretty Kite* (page 50), is practically the scale that he has been learning, and that in many of the songs he has been singing parts of the scale.

THIRD STAGE: TONE DURATION

After attention has been centered for some six weeks on the tones of the key, ending with scale practice, observa-

tion is directed to the third stage, or rhythm, which includes both pulse and duration. The object here, as we have said, is to lead to the discovery that the tones have various lengths which are capable of being measured. Before the pupils are through with this they also find that the measurement can be represented.

We open the new work some day by making the children sing a song and then asking whether all the tones are of the same length. They are not quite sure, perhaps.

"How do we notice the long and short tones?"

"Clap them out."

"All right," and the children proceed to clap out the song.

"Now, are the tones of the same length?"

"No, some go fast and some go slow."

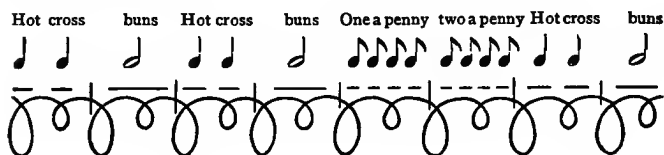
Following such a course of questions and answers, we at last elicit from the children the idea that if we are to discover how long the tones are, we require a means by which to measure them, just as we need a yardstick to find the length of a piece of cloth.

"Is there anything regular in music?" we ask.

"Yes," they answer, "there was something that we walked to and acted and pictured by circles."

Here we have a measuring stick at hand, namely, the regular pulsation. We apply the measure. While the class sings the song, clapping the tones, the teacher swings a circle for the pulse. This is a way for measuring tones. It is seen that some tones last as long as the circle, some twice as long, some only half as long. The children in the

first year have already pictured both pulse and duration separately on the blackboard. Now they combine the two. One child, for example, draws the pictures of the pulse by means of circles, dividing the space above them by vertical lines, one being placed before each large circle, thus marking the strong pulses. Then while the class sings the song again, another child draws horizontal lines above the circles and between the vertical lines. These show the duration of the tones with reference to the circles that mark the pulses.



They have now a united representation of pulse and duration.

We now do for duration what we did for pitch in giving the names of the scale. We tell the children that a tone which lasts a circle may be represented by a quarter note, one lasting two circles by a half note, one lasting half a circle by an eighth note, at the same time marking the notation on the board.

As we developed the child's skill in the recognition of tone qualities by singing very short and striking passages, so we give him practice by changing the tone durations, introducing those with which he is already familiar, i. e., quarters, halves, and eighths. He is extremely interested,

not only in telling the teacher what he hears but in writing it down; and in all new songs learned afterward his skill is put to practical use in those portions that are within his grasp.

FOURTH STAGE: SIMPLIFIED PITCH NOTATION

We now take up the fourth stage of the work, the observation of pitch, and with the purpose of discovering some more accurate way for its notation than the rather rough and ready picturing so far employed, we begin with a primitive picturing of songs. The children have already made pitch pictures of songs in a crude way on the blackboard by placing dashes up and down to show pitch changes in the melody. They see that the dashes give a visible outline of the melodic movement, and a child enjoys making such a picture of some song of which he is thinking and then having his classmates guess what the tune is.

Now a song is taken in which the same tone recurs often, and while the children recognize the familiar air and sing it correctly the teacher draws attention to the fact that although a certain dash represents the pitch of a certain tone throughout, in this free way of suggesting the pitch it is impossible to put the tone exactly on the level that the pitch idea requires. Difference of ability among pupils in this respect is very marked. The more precise and exact ones come quite near what is intended, but the majority require considerable guessing. The teacher shows how valuable it would be if we could tell exactly where the same note would come each time. She takes

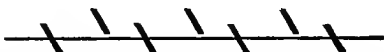
great pains to have the pupils feel the necessity for what she wishes to teach them.

She then asks for suggestions as to the means that might be employed to help get the same note on the same level throughout the song. One of the first suggestions is to draw a line on which the note can be placed. The teacher then sings a song limited to two tones, such as *Gently Rocks My Light Canoe*. (See page 49.)

The usual way

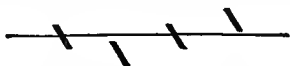


The new suggestion



A line will define the lower tone, and the children quickly see that the space above the line serves to show when to sing the other tone.

The next step is to have the children outline a song which includes three tones, one above and one below the center tone, such as "I want to go." (See page 66.)



The children discover that a single line defines three tones; the one on the line, the one above and the one below it.

Thus the function of lines and spaces is thoroughly learned in its simplest form, and by using melodies which call for more and more pitches, the need of new lines and spaces is brought to the children, until at last they have

built up a primitive staff of five lines and six spaces. In writing on this staff we can use the note heads, which the children already understand, while for the circles we substitute vertical straight lines which show the accent of the rhythm represented hitherto by the big circles.

But as the circles are to be omitted and the vertical line represents only the accent, there is nothing to tell how many pulses there are between the lines. Again, the teacher develops the necessity for some mark to show the number of pulses. The children see that some songs have two, some four, and others, three pulses.

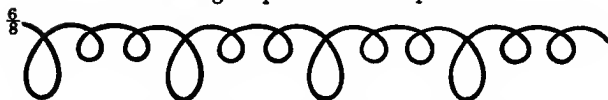
So far we feel the necessity for marking only the number of pulses. The necessity for the lower fraction in the meter signature must also be equally well prepared for by comparing melodies in the compound time of six-eight with simple time. For the children will readily realize that the large circles they have been making in compound meter can be broken up in groups of three circles each. Thus the two circles representing the larger groups may be represented by six small ones. The Mother Goose rhymes will furnish many excellent illustrations for this. When the necessity for differentiating between the two-part grouping of simple meter and the two-part grouping of compound meter is thoroughly realized, the necessity for a second figure to state the *nature* of the pulse, placed underneath the one that gave the *number* in the measure, will be felt and clearly understood.*

* For further illustration of rhythm notation, see "Plan of Instruction by Topics," Chapter XVIII, page 191.

Showing compound pulse as strongly felt



Showing simple basis of compound



Thus all the characters for writing simple music have been developed out of a necessity in the musical experience of the pupils.

In connection with the staff we have now given, the children sing passages that run on the lines of the three fundamental chords, the tonic, the dominant, and the sub-dominant, although we do not give the names. Variety and interest are lent to these exercises by varying the rhythm and manner of singing the chords, and through this practice the children come to feel the difference in musical meaning between the group that runs *doh, mi, soh* and the group that runs *ti, re, soh* or *doh, fa, la*. We place the chord passages on a group of five lines and the children can see that when *doh* is on the line, *mi* and *soh* are on the two lines above it and *re, fa, and la* are on the spaces; while if *doh* is on the space, the reverse is the case. The acquirement of this knowledge sounds like a mere mechanical bit of information. In reality it is a significant step, for it means the beginning of rapid music reading by tone

grouping instead of by separate notes. The moment the child thinks of a particular form of musical expression, as a familiar group, when he sees a succession of three notes on three successive spaces, of which the first is *doh*, he has begun to read music by the words instead of by the letters; he is on the way to understand what he reads.

Another bit of apparently technical work which can come in the latter part of the year is to have the children read scale passages, commencing on some other tone than the tonic and taking various pitches, calling them first *mi* and then *soh*, and singing them to the *doh* above or the *doh* below. Drill of this kind develops the child's command over tone relationships, for if he starts to sing the scale up from a tone thought of as *mi*, he has to sing the second tone only a half step above the first, a mode of progression wholly different from that when the first tone thought of is *doh*. The ear and the mind are alike trained.

FIFTH STAGE: APPLICATION OF KNOWLEDGE

Under four stages we have described the formal work of the second year. The last stage will be taken up with the unifying of this knowledge through its practical application. This is carried out by means of two distinct lines of work.

One of these is by the teacher singing a short motif consisting at first of only three or four tones taken from actual song material, the children being asked to tell how it should be written. The process is then reversed, the

teacher writing a motif and the children singing it. From the very first attempts at sight singing, we must insist that the children conceive the idea of the movement suggested by the three or four notes as a whole, not as a series of individual notes.

To cultivate the children's skill in reading music, various devices suggest themselves. They may be told to look at a motif, then to turn the head, or shut the eyes and tell what they saw and sing it; or, the little motif may be written on the blackboard and rubbed out, the children then being asked to sing it or to show its pitch and rhythm by action.

Two points are insisted on:—first, concentration of attention for observing what is written; and second, welding what is observed into a musical movement. We do not use motifs which consist wholly of tones of the same length and which lack accent, for, even though we limit the motifs to a few notes, we must present all the factors,—such as pitch, change and variety in tone length,—that are always present in music, and we must insist on a musical rendering, not a mechanical spelling. When this is done musically the necessity for the application of ideas of interpretation will be felt by the children. Thus, in this motif work, we are combining interpretative ideas with pitch and rhythm ideas through their notation, practically applying all that has been gone over.

But this is only the first of the two ways in which this knowledge is to be applied. The second makes vividly clear to the child the necessity for the knowledge of the

structure of music. This new work is in the form of song making.

In connection with some appropriate event, such as the first appearance of the birds or flowers or the coming of the pussy willows, or the reading of some unusually interesting story, the teacher will begin by asking the children if they would not like to make up a song about it. Suppose the arrival of the pussy willows has supplied the impulse. Left to themselves, the majority of the children would be at a loss for ideas about the pussy willow that would be appropriate for a song. For the subject of a good song we need either some movement idea which lends itself to verbal or musical description, or some emotional idea which will serve to color words and music. The teacher's work is to develop a situation dramatic through either motion or feeling and then let the children put it into words. In preparing the way for the pussy willow song, the teacher will ask the class questions that suggest the feeling of the brown and gray fuzzy things peeping out into the cold. Would they not be timid, venturing out thus long before warm weather came?

When the story or emotional idea of the song has been established, we ask the class for suggestions for the first line of poetry. We write five or six of the best on the board, the class discuss them, and observe the good and bad points, and vote for the one to be adopted. So with each succeeding line. Sometimes the lines come rapidly and are quickly accepted; sometimes there is much discussion and modification of phrases.

When the couplet or quatrain is finished, we ask for the opening phrase of the melody. A number of children sing their suggestions, and with the aid of the class as to time and duration, we put the phrases on the board. This process forces the singer to have his phrase clearly in mind, in order to sing it over and over in the same way. A good many phrases will be sung which are obvious imitations or variations of others. We throw these out of court.

When a number are on the board—three or four are usually enough—the class discusses which is the most suitable. The argument between the partisans of the different versions is often spirited, and the keenness with which the children give reasons why one is better than another would surprise the person who has never attempted this work. The constant insistence in all the songs the children have had that the music interpret the words, has given them the fundamental ideas of the musical language needed. They know very well that the rhythm of a marching song is different from that of a cradle song, and, though they might not be able to put it into words, they have deduced the fact that plaintive effects, for instance, have *mi*, *fa*, and *la* prominent and that vigorous effects make much use of *doh* and *soh*.

In writing the songs that they themselves have composed, their previous work in breaking up the song into its elements becomes valuable to them. If they had never clapped to a song, though they might have made up musical phrases, they would have had no idea of the particular element of time in it. By writing songs themselves, they

learn to use casual discoveries concerning the elements of music made in the course of clapping, circling, and picturing, and they likewise perceive that the particular way the elements are put together gives the song its emotional character. The exercise connects the expressive song work with the structural work.

This stage also develops the musical judgment in the keenest form in which it can be exercised. For after children have made up a song and have discussed the reasons for using certain tones and rhythms, they are quick to apply the same judgment to the rote songs they have learned. Hereafter their interest in a new song depends not only on the sensuous feeling for melody and rhythm, but on an intelligent appreciation of the way effects are produced. This addition heightens enjoyment and makes it possible for them to sing songs demanding higher artistic perception.

There are, however, two serious drawbacks to this work. First, it takes considerable time. Second, it requires a reasonable amount of either musicianship or poetic feeling on the part of the one who conducts the exercise. Unfortunately, the necessity for making the work conform to a schedule in our public schools leaves little play for creativeness on the part of the teacher. Instead of being a suggestive inspiration to her pupils, she becomes an automatic guide to direct them to certain formal acts. To take up this song-making work as nothing but a musical exercise, approaching it from the technical rather than the poetic side, would be to rob it of all its value.

Rather than that, it would be better to have the children do the regular singing work.

At the end of the second year, the child has individualized the tones of the scale; with the aid of song sentences and hand signs, he has learned the simpler notes and their metric values, has constructed the primitive staff, and has learned to read short passages or motifs on that staff, as a single whole. In interpretation, his tone quality and feeling for musical expression have been directly developed by his daily rote song work. An incentive for more intelligent observation has been supplied, while at the same time the growth of musical judgment has been powerfully stimulated by song making.

CHAPTER VIII

INTRODUCTORY TO THIRD YEAR WORK: TWO ASPECTS OF STAFF REPRESENTATION

ONE essential fact in regard to the staff is commonly forgotten, or at least ignored, in teaching it to children, i. e., that the staff represents tones as fixed instead of as strictly relative. When the G clef appears upon it, the space between the second and third lines represents the pitch A, the international standard for which is 435 vibrations a second. It always represents this one pitch, whatever the key.

The tendency of the instrumentalist is, as soon as he sees the notation, to think what he shall do to produce the sounds called for. That is, unless he be very musical, the concepts he forms from the notation are those necessary to produce the tone, and since this production through his instrument depends upon rapidly relating the notation with what he has to do in order to gain the tones called for, the notation thought tends to become one of fixed rather than of relative pitch.

On the other hand, the vocalist who does not play an instrument is indifferent to the actual pitch, and does not care if it be a little higher or a little lower than that called for by the staff. His whole concern is the interrelation-

ship of the tones presented. After he has sung *Yankee Doodle* in the key of F, he would add nothing to the difficulty of his performance by singing it a minor second higher, although it would then be in the key of six sharps instead of one flat. But the physical operation of the instrumentalist in producing *Yankee Doodle* in six sharps is totally different from that required for it in one flat. The staff presents these differences, and it is therefore true to the conception of the instrumentalist, although confusing to that of the vocalist.

The vocalist needs a knowledge of the staff so thorough that he can rapidly interpret fixed pitch notation into the relative pitch by means of which he thinks tone relationships. This process is often simplified in the early stages of music teaching by going around it instead of conquering it; by telling the children, for instance, that because *doh* is on the same space for one flat and six sharps, it is therefore the same *doh* or tonic.

So long as the piece stays in the same key, the fixed pitch character of the staff will not bother the child by forcing itself upon him. But if his piece passes from the key of F to its nearest related key, that of C, he will find a cancel mark on the third line. On the other hand, if the piece is in F sharp and makes exactly the same modulation, he will find a sharp on the third line—an apparently opposite mark, rather difficult to explain to a person unfamiliar with the fixed pitch character of the staff. Such accidentals are very frequent in modern music; sometimes they entirely contradict the key signature.

The vocalist who, in the manner of children, thinks of the staff as representing merely relative pitches, is obliged either to stop while he figures out the real key of the passage before he can sing it; or, depending on his musical instinct and the general up and down movement of the notes, to guess what the passage is. If, however, the vocalist has a knowledge of the staff like that of the instrumentalist, that is, of its fixed pitch character, although he may not be able to state in what key the passage is, he recognizes the exact intervals presented; hence he knows the relationship between the tones, and this helps him to sing the passage with certainty.

His advantage over the singer who thinks of the staff as representing only relative pitches is apparent. For instance, a musical passage might lie along the track of a chord consisting of a major third, a minor third, and a perfect fourth. This chord might be number one, the tonic, in one key; number five, the dominant, in another key; or number four, the subdominant, in still another key. If the vocalist has grasped the relationship of the four tones that represent it, he can form a clear conception of the group, though the context may be such that he is unable to tell instantly in which of the three keys the passage lies. But if he were entirely dependent on key feeling as expressed through the *doh, re, mi* names, he would find that the necessity for deciding the exact relationship of the chord would prevent him from conceiving it rapidly enough to sing it in time. But if his knowledge of the staff, like that of the instrumentalist, presented to him definitely the

distance between intervals, he could with this knowledge think of how they would sound, and for the moment ignore the more definite analysis the key thinking would require. Instead of depending on the *doh*, *re*, *mi* names, in order to know that the distance from one line to the next is like that from *mi* to *soh*, *la* to *doh*, or *ti* to *re*, through his knowledge of the staff he would recognize it as a minor third, and with the aid of the tone feeling produced by the context he would be more likely to sing the passage correctly than if he had to wait until he settled what the sound names should be with reference to the key of the passage.

Besides this ability to recognize the interval from the staff representation without waiting to figure it out according to the key, fixed pitch notation involves a second element which can be made of great help to the singer, i. e., the actual pitches of the tones themselves. Without training, very few people can remember fixed pitches exactly; but the ability exists in every one in a more or less rudimentary state, and when developed it greatly facilitates music reading. If, for instance, we ask the pupils to sound the pitch C before we give it to them, it will not take long for them to learn to strike it with a fair degree of certainty. By constantly testing the children in this way, and by always starting pieces on their actual pitches, and using the letter names in giving the tone, we can establish a memory for the pitches. In reading, pitch memory is of little help without the key feeling, but is of great assistance when combined with it.

The work of the third grade should do for the students

with reference to the staff, what the formal learning of the multiplication table does with reference to arithmetic. If instead of thoroughly learning the whole table at first, the pupil were to learn only parts of it at intervals and never gain a knowledge of it as a whole, he would very likely go through life without being able to use it readily. This is what happens ordinarily as regards the staff. For eight years the pupils have been told various things about the staff, but in such dribblets that they have been practically vaccinated against a comprehension of it as a whole. The result is that, while capable of solving difficult problems in other subjects, they seem unable, even with serious effort, to pass a simple examination in the notation of music.

CHAPTER IX

THIRD YEAR—COMPLETION OF THE PROCESS FROM SONG TO NOTATION

THE work of the third year completes the first phase of music teaching. In this the aim is to have the pupils connect what they do with the particular effect desired, to make the tone sweeter and more expressive, so that they gradually form the constitutive ideas of interpretation. Similarly, they learn to connect by means of observation, by acting and picturing what they feel as the movement of music, with the particular rhythm and pitch forms that produce this movement: thus they develop constitutive ideas of structure.

Besides developing these two classes of ideas they have learned much of how to note the structural ideas on paper. Their need now is to complete the notation of music and prepare for the new phase of the work which, instead of passing from the song to its notation, reverses the process and passes from the notation to the song.

FIRST STAGE: REVIEW WORK

The first few weeks of the school year will logically be spent in reviewing the old songs for tone work similar to

that suggested in the first stage of the second year; the pupils will also learn new rote songs, and practice singing short motifs from the staff. This plan recalls the technical knowledge gained in the previous year and introduces new pupils to the methods of work.

SECOND STAGE: COMPLETION OF STAFF NOTATION

It may seem, perhaps, that already the essentials for staff notation have been given; and as a matter of fact, as much as is usually attempted has been done. But there still lacks one essential element to make this notation complete, i. e., the knowledge that the pitches represented by the staff are not relative but fixed; up to this point the relationship idea has been suggested by means of the sound names, and the staff has indicated only the order and number of steps; not their actual distances as whole or half steps.

FIRST STEP: BASES FOR COMPARISON

The first need is for the children to attain the power to sing major and minor seconds up and down from any given tone. When they gain this ability it will enable them to compare the relative series represented by the key with the fixed pitch series of the staff, with the result that they will then understand the nature of the staff and apprehend the necessity for sharps and flats.

To begin this work, a song is selected that introduces the minor second out of its regular key position, Nevin's *Wind Song*, for example; or a song sentence such as the

following made up by one of the pupils, "Here I come creeping."



Here I come creeping, creeping, creeping like a mouse.

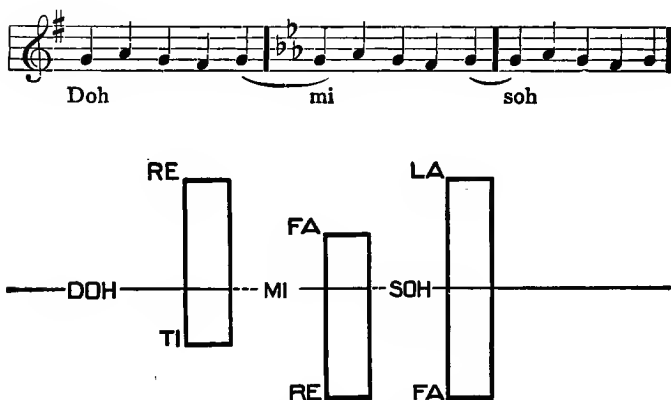
Although the children have been singing minor seconds, they have particularly observed them only in their key position, as *ti, doh* or *mi, fa* and the peculiar nature of the interval has been necessarily associated with these two places. When they sing these illustrations, however, they find that the minor seconds can be produced in any position resembling the *mi, fa* or *ti, doh* with which they are already familiar, and they begin to realize its true nature.

Yet, although they can sing the minor second as *mi, fa* or *ti, doh* in the key position, they find much difficulty in producing it simply as a minor second starting from any tone. Hence, the song experience where the minor second is introduced chromatically is given to the children first; then their "stunt" performing capacity is appealed to and they are given the minor second above *doh* to sing, the teacher always taking care that the tone is thought of as *doh* while the interval is sung to the syllable *la*. They can sing it easily enough from direct imitation; but let them precede the minor second to *la* by singing *doh, re, doh* first, and only the musical ones will show a sufficiently clear conception of the nature of the minor second to be able to change to it after singing the whole step.

While the work is commenced with the aid of the key

names, this is done merely as an introduction, in order to make it possible to utilize the skill already possessed in singing major and minor seconds. The plan is to gain the ability to sing such distances independently of any key feeling, simply as certain definite intervals.

The exercises consist of three formulas sung from the same pitch.



A glance at the above diagram shows that in the first the half step is below the initial tone; in the second, above; while in the third, the tones both below and above are whole steps. The pupil can sing these easily enough if they are taken in their key positions; but when thus sung, they fail to impress the average mind with the differences in distance that the intervals represent. By taking all three exercises on the identical tone, their differences are brought into juxtaposition in such a way that the pupil

is vividly conscious of what a whole step or a half step from a given tone means.

The three weeks during which a portion of the music time is given to such drill should be adequate to give a vivid comprehension of the major and minor seconds to all the pupils, even if some do not perform the work readily. The object is not to make the child do it right the first time, but to make him ultimately conscious of the nature of the two intervals.

SECOND STEP: RELATIVE AND FIXED PITCH NAMES

In singing with the sound names, the children are using the family names of the tones, and the *doh* that acts as papa and gives his name to the group may be placed on a line or on a space; he may be a *doh*, low or high, but wherever he is his entire family cluster about him. Now it is clear that to distinguish between a high *doh* and a low *doh* we must have some definite name to indicate the exact pitch of *doh*. We must know on what street either the high *doh* or the low *doh* lives; in other words, we must have the fixed pitch names.

When the difference between relative and fixed pitch names is understood and the necessity for the latter is appreciated, the names themselves are given. This step may be prefaced by the story of the Greek use of the alphabet names, especially if the children have had any of the Greek stories; or the fact can be stated that the fixed pitch names of the tones are taken from the first seven letters of the alphabet. The pupils are already familiar with

the fact that after the first seven tones the first tone reappears an octave higher or lower, and they can be told that the same thing occurs with the seven letters of the alphabet.

The pupil is now able to compare an actual experience between a song sentence such as "I want to go," sung on the tone G (see page 66), and the actual tones required from a similar sequence commencing with the same letter. The song will call for a half step below G, while the staff will represent a whole step below G. By actually singing what the staff calls for with the letter names, and comparing it with what the tune calls for, the pupil is made vividly conscious of the necessity for the sharp, in exactly the same way that a piano pupil would be, if he did not know the keyboard and commenced to play the tune on G. He would realize that the white key below G didn't sound right, and he would immediately feel for the tone that he wanted. This distinction, which is so easily taught at the keyboard, is a difficult one to establish where no instrument is used; and without some such device for supplying the necessary experience, the knowledge taught with reference to the staff is apt to become purely theoretical and confused in the minds of a great many of the pupils. The basic drill in interval work that such practice requires is of greatest importance and becomes especially valuable because of its introduction early in the course.

The motive for this work is similar to that of the first step; but here there is an additional purpose, i. e., to learn

the actual names of the tones and get the ability to sing from the fixed pitch ladder, starting on any letter as the initial tone. If the work with the aid of the sound ladder, in the previous step, was thoroughly done, the class, as a whole, will have no difficulty in singing the fixed pitch names. It must be borne in mind throughout that these pitches must be taken independently of the major key of C,—that they must be thought of simply as whole steps and half steps,—hence the commencement on A rather than C.

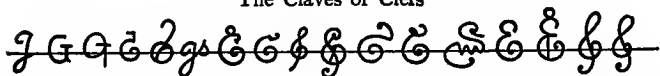
THIRD STEP: CONNECTING FIXED PITCH NAMES WITH THE STAFF

The problem that the teacher gives the children is how to make the staff represent not only *doh, re, mi*, but also the exact pitch or the letter names of the same tones; in other words, how to combine both relative and fixed pitch representation. The previous work shows the need for such representation and also supplies the material. It remains to make the combination.

The story can be told to the children of how, when the staff was invented, people had this same difficulty, which they overcame by choosing one of the letters of the fixed pitch series and writing it on a line of the staff, thus having a particular line represent a particular letter. When one line was thus fixed all the other lines and spaces represented certain related pitches, which followed in the series just as the letters do. The question may now be asked what letter the children suppose the early musicians chose for naming the staff. By writing a few ornamental G's in

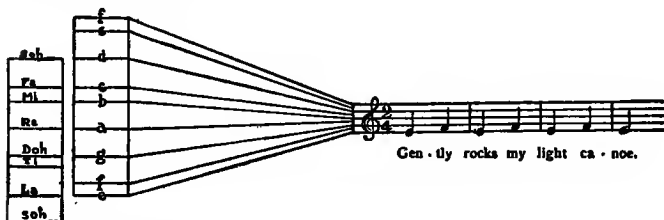
script on the blackboard it will not be difficult to have them realize that the G clef, which they have noticed in music,

The Claves or Clefs



is simply an ornamental G, written on the second line of the staff, for the purpose of making the clef represent the fixed pitch names.

It will now be necessary to make them observe what has happened to the staff through this christening process. The first line now represents the pitch of E, because the second line has the G clef upon it; the space between, therefore, represents F. Since this line and space represent the letters E and F in the fixed series, the distance between them will be a minor second. There is the same distance between the third line and the space above it (representing the letters B and C). The little song sentence *Gently Rocks My Light Canoe* is written on the line and space of E and F.



This now can be sung to the letter names and the children will realize how different it sounds from the way they have been in the habit of singing it. In other words, they find

that *doh* cannot now be placed on the staff anywhere we choose, but only where the sound ladder and the pitch ladder agree. The children practice singing the names of the lines and spaces, starting at any letter and passing to the one above and the one below, until they appreciate the fact that the placing of the G clef on the staff has given all the lines and spaces a definite relationship to one another.

FOURTH STEP: THE SHARP, FLAT, AND KEY SIGNATURE

We are now ready for the final step, i. e., to show how the staff with the G clef can be made to represent the tone relationship of the relative pitch ladder shown on the cardboard, starting at any tone. The little tune representing the intervals of the formula *doh, re, doh, ti, doh*, that is, a major second up and a minor second down, can now be sung from the sound ladder with *doh* on the cardboard held against C on the pitch ladder.* The children will find that the sound names and the pitch names exactly agree. The ladder can now be slipped up to F and the same thing tried; there will be a similar agreement between the two series of names.

But if we slip it up to G, and then sing the series with the fixed pitch names, we shall find that we are singing the formula not as the little tune calls for it, but as if it were *re, mi, re, doh, re*, that is, a major second both up and down. In other words, the tone F does not represent the tone we want below G. The children know that there is a tone

* See illustration, page 96.

there, for they can sing from the sound ladder the formula for that pitch. What is lacking is room on the staff to represent it. The next sound below G is F, a major second away. The tone the children are singing, as indicated by the sound ladder, they realize is a minor second below. The problem now is how to represent this upon the staff.

They will probably announce that a sharp must be placed on the space for F; when asked what this will represent, they will probably state that it will raise the pitch of F. It is best to nip this incorrect form of speech in the bud and show that F cannot be raised because it represents only a minor second from E, and that if we raise its pitch it ceases to be F. What we really sing is an augmented prime above F.

As we have no place on the staff between E and G to represent this tone, except on the space of F, we do it by putting a sharp sign on this space. It is not F raised a minor second but is a tone a minor second higher, represented in the place of F by means of a sharp.

The same formula can be repeated at A, when the necessity for a sharp on the line of G will be appreciated. By holding the tone ladder up against B, repeating the song and comparing it with the series required by the letter names, we find not only that the tone below is too low, as in the other cases, but that the tone above is also too low. Thus the possibility is realized of using the sharp on any line or space which represents a sound a half tone lower than that we wish to sing.

When the function of the sharp has thus been learned thoroughly, that of the flat is studied, and the necessity for a sign to take the place of a tone that is represented too high on the staff is noted. Taking such a song sentence as *I want to go so far away, doh, ti, doh, re, mi, fa, fa, mi*, and singing from F, the pupils find no difficulty in introducing all the tones.



Now let them sing the same series, but with the letter names, repeating the tone of A often enough to destroy the tendency that the memory of the song would have to make them sing a minor second above instead of the major second which the A B represents. The children recognize that while the distance from the space of A to the line of B represented the distance between *mi* and *fa* when they sang with the *doh, re, mi* names, when they sing the same thing with the names that the staff calls for, the distance between A and B requires a major second instead of a minor second. In other words, they discover by actual singing that *mi* to *fa* requires a minor second and A to B represents a major second. They will be made to see that they are singing the tone halfway between A and B, and that there is no way to represent this on the staff, for the next tone above A is B, a major second. They now realize that the sharp sign they have been using will not do, because this represents a tone above that of the line or space on which it occurs.

Now the necessity for a new sign may be fully developed so that even the more thoughtless children will understand what is required. As in the case of the sharp, the flat should not be given until the need for it has been thoroughly felt and the object that it will accomplish realized by the entire class. Then the flat sign can be put upon the line B and the children will perceive that in singing with the fixed pitch names, as required by the staff after the flat is used, they are singing exactly the same tone that the song requires.

They can now be shown that this relation between *mi* and *fa* may be represented on lines or spaces a major second apart. Thus in singing G as *mi* the space of A can be utilized to represent *fa* simply by placing a flat on it, exactly as in the case of A, where a major second was required by the pitch names and a minor second by the sound names.

When the functions of the sharp and flat are thoroughly understood, the pupils are ready for the explanation of the key signature. Taking the cardboard with the *doh, re, mi* names and placing it so that *doh* will come against G in the letter column, we find that the two series agree with the one exception that F sharp is required to represent the sound *ti* below *doh*. This relation can be grasped by singing both pitch names and relative names. Since F sharp has become a regular member of the family when *doh* comes on G, it will save time in writing it to place it at the very beginning; hence, it is put on the fifth line where it is readily seen, and thereafter every note written

on the fifth line or F is understood to mean F sharp. This, the children are told, is called the key signature and always necessitates that *doh* shall come on G. Now by placing the ladder on the cardboard so that *doh* will come on F, it will be discovered that *fa* requires B flat to represent it, and B flat therefore becomes a regular member of the family of tones in which *doh* comes on F. Hence, by placing B flat at the beginning of the staff we imply that *doh* is on F.

Parallel to this work, the teacher carries on song singing which requires drill in tone work, articulation, and expression of the idea. In the process of learning these songs, the accurate observation work of pulse, duration, and pitch of the previous grades is continued. At the same time, the children are made to understand that this accurate learning of the staff is the main business of the singing period, and that a test of their efficiency will be given them at the end of the work dealing with it. Its accomplishment requires three or four months.

The latter part of the third year work will be taken up with practice in the relationship of the three keys C, F, and G, songs being used that make transitions from one to the other and cause the pupils to appreciate the change of key. There should also be considerable writing of the same song sentences in the three keys, both on the blackboard and on music paper, the modifying sharp or flat being placed as the key signature. The work now introduced will apply this knowledge and develop further the notation of rhythm.

THIRD STAGE: FRACTIONAL PULSE

Short motifs similar to those previously mentioned are now written in the three keys, reviewing the time values already learned. Sequences of three or four tones from songs may be sung by the teacher or one of the pupils, and the class may write them in three keys.

Although the children in their rote songs have sung all varieties of rhythm, the forms they have learned to recognize are limited to the pulse represented as a quarter note, the union of two pulses or half note, the division of a pulse into two or the eighth note, and the dotted half and the whole note. These same values with their equivalent rests have been used in both simple and compound meter. The compound meter required one new sign, the dotted quarter; but as the addition of the dot to a quarter exactly completed the pulse, leaving no fraction of time to be represented by a fractional pulse, it resembled in this respect the dotted half and was easily grasped.

The pupils are now ready to study the entirely new effect of placing a dot after a note when the dot leaves a fraction of a pulse to be represented by a succeeding note. For instance, if a dot is placed after a quarter note the tone represented lasts one and a half pulses, and a half pulse note is needed to complete the second pulse. Again, if a dot is placed after a half pulse note the resulting fractional note required is a quarter of a pulse. This produces an entirely different musical effect from that resulting from the use of dots where no fraction of a pulse is left over.

The musical movement or idea thus represented should

grouping fractional pulses. Familiar songs which involve the dotted pulse or half pulse are sung; such are *The Star Spangled Banner*, *Home, Sweet Home*, *The Red, White and Blue*; in fact, there is hardly a song that does not supply many illustrations. It is best to take strongly rhythmic tunes which the children have sung by rote, and as they sing have them swing the pulses and think how the tones are related to them. It will help greatly to have on the board a diagram representing the tunes,—by circles and dashes,—to show the relation of the short to the long tones, and make it clear that the former belong to what follows rather than to what precedes.

After this peculiarity has been carefully observed, the way it is expressed in notation will be studied. The children will notice that in writing the tune the fractional tones are part of the time measurements of the preceding tones; that in this respect dotted pulses and half pulses are alike, but that there is a fundamental difference by which they can always be distinguished: the dotted pulse requires not only the pulse on which the tone begins but the commencement of a new pulse before the fractional tone and thus it follows the second pulse, while in the dotted half pulse the fractional tone is sung just before the next pulse; the dotted pulse and its fraction complete two pulses; the dotted half pulse and its fraction complete exactly one pulse.

It will be seen in this presentation of dotted notes that the attention is first drawn to the musical effect, then to the idea itself, and lastly to its representation in relation to the idea and not in relation to the arithmetical problem

which the notation presents. The latter is really diametrically opposed to the musical effect, since it represents the fractional note as part of what precedes, while the musical idea requires the fraction of a note to be united to what follows it.

After this principle has been represented, it is practically applied to motifs. For instance, the scale is written as dotted quarters and eighths, then as dotted eighths and sixteenths, and is sung in both ways, the pulses being swung meanwhile. It is also sung at different rates of speed, until the children realize that the dotted quarter followed by an eighth is not a longer representation of the same effect, as is the dotted eighth followed by a sixteenth, but one entirely different, due to the entrance of the second pulse into the first. For if we change the speed of our pulses and sing the dotted pulse followed by an eighth so that it is faster than an eighth followed by a sixteenth, the effect is still the same.

FOURTH STAGE: APPLICATION AND DRILL

Motifs are now taken from songs in which the melody moves in pulse tones, and the children are asked to change these according to their fancy by introducing dotted pulses and half pulses. They should write both the original as well as the changed version on the board and the class should sing both. With this increase of their knowledge the children should be practically able to write the notation of their own songs.

The children now have an understanding of the notation,

for all the essentials have been worked out from the feeling of the idea in music. This principle has been indicated by action and diagram until the idea has been thoroughly grasped, and then the notation that represents the idea has been learned. What they need now is sufficient drill in the application of this knowledge. The rest of the third year is taken up with making perfectly clear the staff representation of both pitch and rhythm so far illustrated. With the commencement of the fourth year, as will be seen in the following chapters, systematic drill will develop a technique for a sufficiently rapid use of this material to make it musically practical.

CHAPTER X

INTRODUCTORY TO THE SECOND OR SYNTHETIC PHASE OF MUSIC STUDY

THE purpose of this chapter is to explain the principles that will govern the work in the next three grades and to compare it with that of the work of the first three grades, in order to give a clearer idea of the principles underlying the work as a whole.

The pupils have been learning the exact differences of the pitch and time durations of the tones occurring in their songs. At the same time this analytic process has been carried on with reference to the song or part of the song as a whole, so that the musical significance of what was being learned should not be lost. The necessity for recognizing the separate tones as parts of a melodic movement, or musical thought, is especially urgent in music in which analytic study so soon loses its significance for lack of connection with what it serves. Such connection is not as readily lost in studies where the material is presented to the eye, as, for instance, in nature work.

The way in which the study of a flower is taken up will serve to illustrate our purpose. From the beginning the impression of the thing as a whole is perfectly clear in the

mind; the ideas of dandelion and violet cannot possibly be confused. The aim of the teacher, therefore, is to lead her students to discover how these beautiful wholes are made up of complicated parts; hence by a process of analysis the flowers are dissected into calyx and corolla, stamens and pistil, and these in turn are further subdivided. The teacher has no fear that anywhere in the process the parts of a dandelion may be confused with those of a violet. In other words, the consciousness of the whole is never lost because of emphasis upon the relationship of its parts. It would be absurd to suggest that the teacher while showing how the petals of a rose unfold, runs any risk of having her pupils think they are examining a cabbage. This examination of parts is as far as nature study goes.

On the other hand, in the analysis of music, the relationship of the part to the whole must be constantly kept in mind. In this it resembles manual training in which the parts of the sled or stool that are being made are constantly thought of in relationship to the completed article present in the mind. In this respect the purely creative artist requires constructiveness in a far greater degree than the mechanic. In the beginning, the object he is to create exists only in the mind, and he gradually makes this manifest by combining parts. He is distinguished from the scientist in that the scientist is interested in parts because they are elements, whereas the artist cares about them only as they may influence the effect in the whole conception. The aim of all his work is so to relate the parts that one strong, dominant impression shall be made: if he be a

painter, all the separate colors must combine to form one tone.

The composer, like other artists, aims to produce a certain effect of the whole. By means of various tone relationships woven together, he expresses one theme, which would be altered were any of the component parts omitted. But in his effort to present his composition as an entirety, the musician meets an obstacle foreign to other artists. Music, unlike painting or sculpture, or even architecture, does not immediately impress one as a unified whole. It has to be presented in time through an infinite series of effects; tone succeeds tone in a melody, chord succeeds chord in a symphony. Tone and chord must be held in memory and related to larger and larger units, however unperceived the process may be, until at last we have one of the most complex demands on the synthetic ability of the human mind.

Unfortunately, human experience affords but little opportunity to prepare for this demand. The ordinary naïve experience of the race produced the foundations of music in folk song and dance, but between these and the vast tonal creations of Wagner or Beethoven there is a gap that this folk music does not supply. Where talent and environment are favorable this may be easily bridged; but unfortunately for the large majority, general experience and average ability do not suffice for bridging this chasm. In order to give the large majority the possibility of enjoying music otherwise beyond their comprehension, it is preëminently the function of the public schools to supply

the needed training in musical synthesis, or the relating of the parts to the whole composition.

In the first three years of school training, starting with the song learned as a whole from imitation, we lead the pupil step by step to recognize the part that tone color and manipulation play in the expression of the whole; in other words, we give him ideas of interpretation. Then, too, by means of acting and picturing, and finally by notation, he has learned the subtle tone relationships that produce the movement of the tune. Thus he has developed ideas of structure.

The aid of music teaching is primarily to make possible a deeper appreciation. Appreciation is constructive. Hence, the work of the following three years utilizes the power gained in observing parts in relation to the whole, for it starts, not with the whole as in the first three years, but with the parts themselves. The aim is to have the pupils conceive the whole from the parts. Therefore the study of the second three years is a more formally synthetic process, doing for music what we do for architecture, painting, or literature when we appreciate a building, a picture, or a poem, by getting the effect of the whole through becoming conscious of how the parts unite to produce it.

This process may seem to lead merely to the attainment of the skill necessary for sight singing. But while sight singing is the immediate aim, the real aim is to attain the artistic power of grasping the unity of the separate impressions that the eye or the ear conveys to us,

On the other hand, that it is impossible to master the constructive side of music essential to full appreciation, unless one first goes through the analysis requisite to make clear the nature of the musical elements, will be evident as soon as the relation between the analytic and the synthetic process is understood.

The first three years' training has been concerned with learning the musical ideas and their notation. The pupils are now ready to test the knowledge by putting musical ideas together. In the following chapter the first step of this synthetic process will be described.

CHAPTER XI

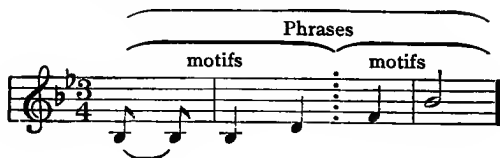
FOURTH YEAR WORK: PHRASE CONCEPTION

FIRST STAGE: ACCURACY IN PHRASE CONCEPTION

IN order that a beginner may think out how a musical passage goes, it is necessary that the passage have a form distinct and definite enough to enable him to grasp it as a whole; at the same time it must not be so long that it will be beyond his capacity to relate all its parts. If the reader will sing the first two tones of *America* (see page 114) he will not necessarily be conscious of any characteristic idea in connection with the form that the sound represents. Let him add the third and fourth tone and a fairly definite form will be established; still, the passage does not seem to be complete. Now let him add the next tones, making six in all, and he will have a clearly defined passage. The passage is so clear and well defined that it forms, as it were, the text of the entire composition, being repeated in different pitches with only slight changes, and these in the form of variations rather than of radical changes. Take another illustration. If the reader will hum over the first six tones of *The Star Spangled Banner* he will find that the first four tones group together, as do the last two, and

that these groups unite to form the rhythmic text of the tune.

THE STAR SPANGLED BANNER



It is obvious that if we should take a portion of one of these units by itself, it would require considerable musician-ship to decide from exactly what tune it was taken, but he would be a very dull person who could not recognize the complete unit. This unit in both these tunes forms a complete design which keeps recurring in the remainder of the tune, and which gives it a definite character. Hence, in training a beginner to grasp the complete musical thought, we should take such an organic element for our unit.

If the reader will sing *America* and *The Star Spangled Banner* through, he will see that the rhythm of the phrase expressed in the first six notes in both tunes keeps recurring, though it is almost always more or less changed. These changes occur sometimes in the number of tones used in a pulse, making a variation in duration; more often, however, change is in the distance of pitch interval or melodic curve, while sometimes it is in both pitch and duration, leaving only the metrical number of pulses to show the relationship of thought to what precedes and follows.

It is evident that there are two essentials in the study of such elements: first, the grasping of the phrase itself; and,

second, the ability to recognize its main features under the variations through which it passes. We can recognize in both these tunes a number of familiar passages where the phrase is well marked. In making this point clear to the children these phrases are put on the board, under one another. For instance, if we write the tune *America* in two-measure groups, we shall have it in phrases.

AMERICA

Phrases

The image displays seven staves of musical notation for the tune "America". Each staff is numbered 1 through 7 on the left. The music is written in treble clef with a key signature of one sharp (F#) and a time signature of 3/4. A large bracket above the staves is labeled "Phrases". Each staff contains two measures of music, representing a phrase. The notes are as follows:

- Staff 1: Quarter note G4, quarter note A4, quarter note B4, quarter note A4, quarter note G4, quarter note F#4.
- Staff 2: Quarter note G4, quarter note A4, quarter note B4, quarter note A4, quarter note G4, quarter note F#4.
- Staff 3: Quarter note G4, quarter note A4, quarter note B4, quarter note A4, quarter note G4, quarter note F#4.
- Staff 4: Quarter note G4, quarter note A4, quarter note B4, quarter note A4, quarter note G4, quarter note F#4.
- Staff 5: Quarter note G4, quarter note A4, quarter note B4, quarter note A4, quarter note G4, quarter note F#4.
- Staff 6: Quarter note G4, quarter note A4, quarter note B4, quarter note A4, quarter note G4, quarter note F#4.
- Staff 7: Quarter note G4, quarter note A4, quarter note B4, quarter note A4, quarter note G4, quarter note F#4.

There will be seven groups, all alike with reference to metrical grouping, each containing two measures of three pulses each. The first, second, fourth, and fifth groups vary in pitch as well as in melodic curve, but are alike in their duration values; the third, sixth, seventh, and eighth vary in durative elements as well as in pitch and melodic curve; these variations, however, are only in parts, so that the relation to the original is perfectly evident. After a few tunes have been thus analyzed the pupils see how changes in pitch, melodic curve, and duration are introduced in the metrical pattern, without departing so far from the original as to prevent recognition of the relationship.

For further practice the phrase of a familiar tune, or of a new one, is taken and the pupils see how many effective variations they can write for themselves. This may be done by one at the board, the others criticising and suggesting; or separately at the desks, with only the original phrase written on the board. In the latter case, each pupil sings the variations he has written while the class state whether the changes introduced are in pitch or rhythm, or both combined, and in what pulses. It must always be borne in mind that the changes should be only variations; through them all must be felt the original.

There can be little doubt of the value of such an exercise in developing the very qualities essential to the aim of public school music. It draws attention to the idea, brings out the structure and nature of the melody, and prepares the student to follow the complex designs that the great works of the masters present.

SECOND STAGE: SPEED IN PHRASE CONCEPTION

But this training can be made more intensive if we add to it the skill needed by the sight singer. The sight singer must not only grasp the original design and hold it firmly through the multitude of changes that it undergoes, he must also do it rapidly, thinking ahead of his singing, for his whole ability to sing at sight rests on his power of rapid comprehension. Like the reader of poetry, he must see a line or two ahead. This additional feature we shall term speed work, for it is necessary for the pupil not simply to grasp the idea eventually, but to do it with sufficient speed to enable him to sing the passage. If this process that precedes the singing is definite, the production rarely causes difficulty.

To give training in this division of work an unfamiliar phrase is written,—at first one not longer than an idea of three or four notes,—which, after it has been fairly seen, is quickly rubbed out, and the children are asked to sing the passage. By gradually increasing the length and complexity of the unit there will be a steady advance in the capacity to see and comprehend. Another way to attain the same result is to point out a phrase on the blackboard staff without writing the notes. This is easier than the preceding in one respect: the moving of the pointer suggests the rhythm. A third method utilizes the geography charts which most rooms have. A number of short phrases can be written on the board before the children come in and the map pulled down over them. By once raising the map and promptly lowering it again, the children get a

rapid glance at the passage; they can sing as much as they have been able to grasp.

The essential thing in this work is that the pupil shall not spell note by note, but shall get a conception of the phrase as a whole before the first note is uttered. This is one of the most difficult things to accomplish, and in the early stages of the work even the most experienced teacher may be deceived as to which process the pupils are following, because they are so skillful at singing without thinking that they can spell out passages fast enough to make them sound as if the correct mental process had taken place. But the limit of this rapid spelling is soon reached, and just at the time when musicianly work is expected from children in the upper grades, we unfortunately discover that the very foundation of right musical thinking has not been laid. Hence the need of the strictest attention in order to make sure that in the first steps of phrase reading it is a legitimate reading and not a spelling. If this first step is taken correctly, practice will develop skill. If not, the ability to spell rapidly from note to note will prove inadequate just when the teacher is expecting to see the fruit of her labor.

Children of this age enjoy speed work intensely. It is a challenge to their ability, and a chance to show their skill and power of concentration. The difficulty lies in seeing that every individual does the work, for it is easy to get an apparent class response while in reality a few of the leaders are giving the idea and the majority are merely following. In this event it becomes a stimulating exercise

only for those who least require it, and entirely leaves out the slow and dull who really need the practice. This result can easily follow and the teacher hardly be aware of it. The way to prevent it is by careful selection of the material, to the end that it may exactly suit the capacity of the pupils. If the passage is too difficult or the changes allowed are so radical that the original is lost, a large majority of the class will derive no benefit from the work.

All the exercises so far described in this chapter are supplementary to the reading of the music that is used in the grades, and should be carried on in connection with it. If the phrases in the songs of the reader are taken as material, the exercises become a stimulating aid, not only for learning the songs rapidly but for the musicianly comprehension of their structure.

Constant comparison can be made between the structure of the music and its adaptation to the words. In a good song book much attention is paid to this element and the words become a helpful index to the structural thought of the melody. Unfortunately there are a great many songs—some of them fine ones—in which the form of the melodic thought and the form of the poetic thought do not agree. The first measure of *America* is an unfortunate example of disagreement between the accent of the pulse and that of the foot. Where singing is done with proper consideration of the ideas of interpretation and structure, the pupils become critics of the material given them and it is easy to awaken their interest when they find a really expressive song. Their pleasure now is not confined to a

senseless reaction to its jingle or sentimental sensuousness but is a real appreciation of the work, for this appreciation is being judged for its expressive value in relation to ideas.

THIRD STAGE: LEARNING NEW KEYS; RHYTHM PRACTICE

The phrase work, with the training in musicianship that it demands, is of so great importance that it can well be made the chief work in structural ideas for the entire year. In connection with this it will be well to enlarge the knowledge of keys by applying the principles learned in the third grade.

The essential thing to bear in mind is that in passing into a key requiring one more sharp or one less flat the fourth of the old key becomes the seventh of the new; while in passing into keys requiring one more flat or one less sharp the opposite is true, for then the seventh of the old key becomes the fourth of the new. Memorizing the relationship of the new *doh* or tonic to the new signature helps in the quick and sure recognition of the key. The last sharp will be the seventh, while the last flat will be the fourth of the key. By this method the keys are presented in their relational aspect and a basis for appreciation of modulation is laid.

The advance work in tone measurement for the fourth year will be special practice in compound rhythm. This introduces no new duration values, but the swing, or go, of its pulses needs practice. The pupils by this time will have had plenty of experience in their songs, hence all that is needed is to associate the sound of the compound pulse

with its appearance. The first two units in the even and uneven ratios given in Chapter XV, page 152, should be practiced in monotone in various combinations until the students are familiar with the swing of the pulse.

It would help to make frequent comparison with the similar ratios in simple grouping until the distinction between simple and compound can be readily conceived.

CHAPTER XII

SPECIAL WORK OF THE FIFTH YEAR: FORMAL STUDY OF TONE AND KEY RELATIONSHIP

THE regular work of the fifth and sixth years merely develops further what was introduced in the fourth, i. e., the passing from the notation to its conception and expression; or, in other words, learning to think rapidly from the way the music looks to the way it sounds, and then singing it. Nothing fundamentally new can be introduced either in pitch or in notation, with perhaps the exception of syncopation, in which the metrical regularity of the pulses is disturbed. The complexity of syncopation can be easily studied in connection with the songs in which it occurs, this practice being sufficient for the use of the general student.

There is, however, some further technical knowledge which is of great value in general musical training. The introduction of a limited amount of such technical work is for the aid its practice gives in musical appreciation. This technical work is needed during the fifth and sixth years, but its exact place may be regulated by the efficiency of the individual class. We shall, however, describe the

various kinds of work in the order in which they would naturally come in this period.

FIRST STAGE: THE FUNDAMENTALS OF VOICE CONTROL

In the fifth grade, for instance, it would be well to develop a more precise knowledge of the essentials of good tone. So far, all the work done in tones has been accomplished by focusing attention on the nature of what is being expressed. Even in singing scales, chord passages, and exercises on vowels, where the aim has been correct intervals and pure vowel tones, the expressive purpose of what is done has not been lost. Scales, chords, and vowels have been so sung that they would be significant—would have a meaning in them because of the pleasure they awaken. And in trying to make them significant, the pupil has made them beautiful. In other words, all the study has been so planned that the child should not lose the connection between what is done to produce good tone, and the idea or reason for doing it. Consequently, by the time he reaches the fifth grade, he possesses fairly well-established habits of good tone production. The aim of the work now is to formulate the principles that underlie these habits, in order to enable him to act with greater certainty and sureness. What is done is identical with what is accomplished in language, where, after habits of correct speaking have been established, not by rule alone but by appeal to meaning, the pupil takes up, in the latter part of his school days, the formal study of the principles of good usage as embodied in grammar.

So with regard to tone production, formal rules for some of the steps in attaining required results are now presented. Ever since entering school the pupils have had experience of the closeness between sitting up straight, good breath, and tone quality. This experience is formulated as the first rule for good singing, i. e., that the tone is controlled by the organs with which we breathe. This doesn't mean that we fill the lungs, then tighten up the throat and hold the air in, much as the small boy does with the paper bag he bursts; but it does mean that the tone is controlled by the muscles about the chest, ribs, abdomen, and back, no one held rigid against the others, but all in control and moving together. Whatever is done consciously to produce good tone is through this breath control.

The second principle is that all the muscles about the throat and jaw must be loose and flexible. It is necessary to state this rule because children knowing that the tone is produced in the throat, will probably as soon as they endeavor to get good tone, unconsciously make effort in the throat; this effort tightens it, thus doing much mischief instead of good.

The third principle is that the body itself is the instrument that sounds. With every change of pitch and of vowel, whenever these tones are well-made, there goes on a corresponding change, especially in the head. It is possible for the body so to reënforce and develop the tone started by the throat, that such changes become practically the chief factors in tone quality and color. This vibration indicates a harmony between what starts the tone and

what gives it character. When the tone is felt as being entirely in the throat, without the accompaniment of this sympathetic vibration, especially of the lips, face, and nose, it shows that part of the organs which should produce the tone are not at work, and the resulting tone will be hard and coarse. A flabby, devitalized body has the same effect on the tone quality of the voice as the loosening of the joints would have on the tones of a violin. Hence, it is important to draw attention to the need for a sympathetic vibration of the body with the tones which we sing. The formulation of these three principles will help in strengthening the good habits already formed and will keep bad ones from being developed.

All this can be made practical, however, only when presented by good example; for imitation, after all, is the main thing to depend upon. At the same time, since the pupils have had experience and are sufficiently mature, it is necessary to arouse a mental consciousness of the agents employed in good tone. In the fifth grade the children's voices have not yet begun to change and there is still time enough ahead of them in school to apply the principles taught. They have had four years of practice to supply them with the necessary experience upon which to base this technical knowledge. The efficiency of many public speakers would be vastly increased if only good habits of tone production and an intelligent comprehension of the essentials had been started in childhood. Even if the early application had not accomplished much, these would have borne fruit in maturer years.

SECOND STAGE: DEVELOPMENT OF THE MINOR MODES

Before formulating the experience which the pupils have had in their songs with reference to the minor mode, it will be well to consider the problem by itself, since among teachers there is considerable divergence of practice. One group makes tonality the central thought. To them each *tonic* has two aspects or tonalities—the major and the minor—and the nature of a tonic is not thoroughly understood unless these two tonalities are developed together. A second group of teachers emphasize the identity of the tones employed as expressed by the signature. To them every *key* signature has two tonalities; but the tonalities, instead of being on the same tonic as with the first group, are on different tonics, a minor third apart. Those who emphasize the unity of the tonic thought would naturally first take C major and then C minor, thus changing signatures, but keeping the same tonic. Those who emphasize unity because of the identical tones employed, put their stress on identity of key signature, and in studying C major would relate A minor as being an identical group of tones, but a shifting in emphasis taking *la* rather than *doh* as tonic, thus producing the relative minor mode.

In the plan about to be given here, I have followed the second procedure. The reason for this lies in the practice common in America of not changing the key names in the ordinary modulations that occur: for instance, in going from C to the key of G major, G F sharp will not be sung as a new *doh, ti*, but as *soh, fi*, in spite of the decided presence

of the *doh, ti* feeling. The reason for this practice is probably partly in the nature of staff notation, and partly because the new key, for the very reason that we expect the return of the opening key, is not so completely established in the mind as a change in the sound names would imply. In the greater number of modulatory changes, pupils both young and old prefer to struggle on through a modulation with the tones, partly contradicting what the key names suggest. Thus so little practice in changing key names is obtained that wherever the change would be easier, it is not employed for lack of facility to do it readily. For this reason, in teaching the minor mode, as well as the related key group treated in the fourth stage of this chapter, the plan has been to awaken a consciousness of the changed key feeling that results from modulating into the tonic dominant, and the three relative minors, while continuing to use the key names of the original tonic. Through the frequency with which these related keys come, the pupils learn to adjust themselves to the modifications that the sound names of the original tonic undergo from the presence of these related modulations. Thus the key names are not those of a single key, but those of the tonic of the piece, and gradually acquire the wider significance that the modulations introduce. This association is helped by the modified names that are introduced for the tones actually changed from those employed in connection with the original key. In accordance with this plan, the minor will be introduced first as relative minor, where no change in key signature is required, rather than as tonic minor,

where an unusual change in key signature is necessitated. When we consider how rarely pieces beginning in the minor are used in schools, and how by far the larger part of the children's experience with the minor up to this time has been in the form of passing from a major tonic to its relative minor, the treatment of the relative rather than the tonic minor seems fairly consistent with experience. On the other hand, to start out with a minor song and call its tonic *la* when no relative major is present, seems a gross inconsistency, for the excuse of identity of key signature is not present. In dealing with such a song as *The Jolly Miller*, after beginning as I have done and developing the sense of the new tonic feeling on G, many would prefer, instead of keeping the relative sound names of the major, to call the new tonic *doh* and its minor third *mi*. This would greatly help in developing the true quality of the minor tonic, but for a successful carrying out, it would necessitate that the same practice with reference to a tonic minor as is given to the tonic major be carried as far back as the second grade, when the nature of the major tonic was first established. Since little opportunity is given for singing songs which commence in the minor, it has not seemed wise to go into the distinctions necessary for presenting this method of teaching it, however valuable it might be from the point of view of musicianship. The minor as here presented is consistent with the experience of the pupils with reference both to tone and notation. Its inconsistency lies only in singing the minor tonic to *la* and in the changes hereby involved.

Turning now to the way the minor thought will be presented to the pupils, we must bear in mind that they have not only sung many minor passages, but that they have had an occasional song which began and ended in the minor mode. These songs have been learned chiefly by rote and the minor effects have been observed only for their expressive values, without any attempt at explaining how they were produced.

Some such song as *The Jolly Miller* is now placed on the board and the children notice that, although the signature indicates the key of B flat, the *doh* of the key does not control the tune as it does in most of the songs they have sung. Owing to their previous experience there will be no difficulty in drawing from them the necessary observations that the *la* and *mi* of this tune seem to be the important tones corresponding to *doh* and *soh* of their usual experience. Other minor tunes are sung in other keys and the children make their first generalization that the signature does not always tell that *doh* and *soh* with their brilliant qualities are to be the ruling tones of the key, but that their places can be taken by *la* and *mi*, the whole group being thus given a darker and more somber effect. Comparisons of major and minor tunes are made by singing them in turn and focusing attention on these two groups of tones. If the teacher is wise and patient she will be able to lead a large majority of the class to feel that the *la* and *mi* of the minor tunes have the same relationship in the minor group that the *doh* and *soh* have in the major.

The developing of the feeling for the minor tonic and

THE JOLLY MILLER

Poco allegro

mf

The musical score is for a song titled "The Miller and His Mill". It is written for voice and piano. The key signature is B-flat major (two flats) and the time signature is 6/8. The tempo is marked "Allegretto". The score consists of two systems. The first system shows the vocal melody and the piano accompaniment. The vocal melody is in the treble clef, and the piano accompaniment is in the grand staff (treble and bass clefs). The lyrics are: "1. There was a jol - ly Mil - ler once lived. 2. I live by my mill, she is to me like". The piano accompaniment features a simple harmonic pattern in the right hand and a more active bass line in the left hand. The second system continues the melody and accompaniment.

on the riv - er Dee. He work'd and sang from
par - ent, child and wife. I would not change my

morn till night, no lark more blithe than
 sta tion for a ny oth - er in

he. . . And this the bur - den of his song For
life. . . The song shall pass in jo - vial round, And

ev - er used to be: I care for no - bod - y,
go from me to thee; I care for no - bod - y,

no, not I, If no - bod - y cares for me.

the recognition of its tone quality are of the utmost importance, not only for learning the minor, but also for a clearer understanding of what the tonic quality really is. When this has been thoroughly felt, the reason for calling *la* number one of the minor key, as we have called *doh* number one of the major key, will be grasped, as will the consistency of naming the minor from the pitch or letter name of *la* its tonic. The children will now see that *The Jolly Miller*, which according to their former knowledge seemed to be in the key of B flat, is really in the key of G minor.

Enough minor songs may be given the children to show that a major signature can represent a minor key. The way in which the same signature can stand for both major and minor tunes can be well illustrated simply by transposing a tune, or part of a tune, so that a melody which began on *doh* shall begin on *la*. It will be seen that while such a transposition from major to minor does not alter the essential outline of a tune, yet it does give the same group of tones a dark instead of a bright aspect. The difference is comparable to that between the same object as it appears in sunlight and in shadow.

The essential thing for the pupil to bear in mind is that when, on beginning to sing the sound names from the signature, as has been his custom, he finds *la* and *mi* the prominent tones, he must think of the group as being in the minor. He must give to these tones not only the color they have had in the major, but, more important still, the added qualities that their position as first and fifth (tonic and dominant) of a minor key demands. He will have

to be cautioned that hereafter in starting keys, he must do something more than look at the signature; he must also look at the music and see whether *doh* or *la* is the important tone. In other words, he must imagine how the music would sound. If the qualities of *la* and *mi* are predominant, the piece is in the minor and must be called after the pitch name of *la* rather than of *doh*.

After the qualities of the *la* and *mi* in the minor have been thus observed and studied, the chromatic tones that so often occur in the minor can be observed. For example, just before *la* in a minor group instead of *soh* we may often have *soh* sharp, which we sing to the sound name *si*. By their previous practice the children are able to sing *la*, *soh*, *la* and *la*, *si*, *la* and can be made to notice that changing the *soh* to *si* helps to give *la* its important position, which makes it seem like the tonic of the key. Taking a tune in which the melodic form of the minor occurs, they find that *fa* as well as *soh* is often changed, especially in upward passages.

When all this observation and analysis has been carefully worked out from the songs, the work requiring a number of weeks, the children are ready to study the scale formation of the minor. They will have no difficulty in singing what some call the natural minor scale, i. e., the sound names just as they occur in the major but beginning and ending with *la*. We take this series first, in order that the relation between major and minor keys may be well illustrated. The fact that the pupils have had *soh* sharpened in many of their minor songs makes them see the necessity

for a scale which substitutes *si* for *soh*. In order to sing this effect readily it would be well to practice *mi, fa, mi* and *la, si, la* (above) in succession, one requiring a half step up and the other a half step down. Then *mi, fa, la* or *la, si, mi* can be sung, and finally a half step following the wide skip may be introduced,—*mi, fa, si, la* and *la, si, fa, mi*.



Nothing has been said of singing the augmented second. Ability to sing the unfamiliar intervals lies not simply in recognizing the nature of the distance between them, but in feeling their relationship to the strong and fundamental tones between which they occur. After singing tunes in which the melodic form of the minor scale occurs, a melodic scale is constructed and practiced. If pupils have difficulty in singing the *mi, fa, si, la* of the upper passage, it can be practiced as *soh, la, ti, doh* until the intervals are clearly in mind, the return group being sung as *la, soh, fa, mi*. The children observe how this series both resembles and differs from natural and harmonic forms already familiar.

This practice in constructing and singing the harmonic and melodic scales, following as it does experience in singing songs based on the keys, makes the technical knowledge thus gained, vital and of real value in musical education. This work in the minor mode can be supplemented by the use of minor phrases in a way similar to that in which major phrases were used, by transposing minor phrases into major, and vice versa, and by making up minor songs.

CHAPTER XIII

SPECIAL WORK OF THE SIXTH YEAR. CHORD AND KEY RELATIONSHIPS

THE regular work of the sixth year continues the study of sight singing introduced in the fourth and developed in the fifth year. Starting with notation, the pupils aim at the quick recognition of short musical passages accurately enough to sing them as wholes, not spelling note by note, but reading by phrases. The sixth year closes this second phase, already mentioned as passing from sight to sound, and brings the pupil to a point where he can begin to apply the power gained in recognizing musical phrases, especially those for instruments, so as to combine them in larger forms. In considering the special work presented in this chapter, it must be borne in mind that the largest portion of the time should still be given to the regular training in sight singing.

FIRST STAGE: OBSERVING AND NAMING CHORD QUALITIES

Children from the second year onward have practiced singing along chord lines, *doh, mi, soh* or *fa, la, doh* for instance, and divisions of the class have occasionally sustained the different tones of the chord, an excellent tuning

exercise. In the fourth and fifth years something in part work was attempted. It is now time to gather up this experience and organize the knowledge of tones sounded simultaneously in chords, thus doing for the chord work what the formal work in tone and in the minor mode has done for these two subjects.

While the direct relation of the chord work to the previous musical experience of the pupil cannot be as closely shown as in the previous topics mentioned, the practice in singing and observing chord combination as an independent exercise is of special value in quickening the mind to tone relationship. Hence its indirect advantage to musical appreciation is great. But this advantage will not be realized unless the teacher so conducts the work that the pupils are constantly obliged to observe and describe what they individually sing in relation to what they hear.

The work is commenced by dividing the class into three parts, or choirs, without any reference to high or low voices. The first step is the study of the triad or three-toned chord in its root or A position. The pitch of C or D is given, and the chord of *doh, mi, soh* is sung, the choirs taking turns in singing each of the tones of the chord. After the pupils have tried the chord and know what they are to do, they are asked to observe the characteristics of each of the tones as they sing them: the ease with which they are sung: the quality of each tone which stands out more distinctly because of the relationship to the other two tones: and to tell for which one of the three tones the chord should be named. This work will reënforce the practice that the

pupils already have had in recognizing the character and positions of the tones in the key. In fact, singing them together as a chord makes their quality more distinct than when singing them in succession as melody. There will be no difficulty in giving positive descriptions as to the characteristic effects of each tone in the chord, and the pupils will decide that *doh* is the only tone after which the combination or chord can be named.

The second step will be to arrange the same chord in the two other possible positions, that of *mi*, *soh*, *doh* and *soh*, *doh*, *mi*, the problem now being to observe and describe the new effects produced. For, while the same tones are employed, the smooth and solid character of the first arrangement has given way to one less so. The three arrangements of the chord are now named A, B, and C positions of the *doh* chord. They are practiced, compared with each other, and described.

It will be a surprise to a teacher who has not tried this work to see how accurately the very large proportion of the class can describe what they hear.

The third step is to combine similar chords to accompany this (see page 139, Ex. A, I, II, III, IV). The pupils are told that it would be no more than common sense to have one tone at least the same in two chords if they are to sound connectedly. When people wish to move smoothly they take up one foot at a time and take short steps, and so if we wish to go to another chord from *doh* it would be best at least to hold one tone and let the other two go to the nearest possible position.

Starting with the *doh* chord we can try holding *doh* and moving *mi* and *soh* to *fa* and *la*, or we can hold *soh* and move *doh* and *mi* to *ti* and *re*. These are the only two chords that can be formed under these conditions. Each of them is now studied as was the *doh* chord so that they are practiced in different positions and the tone after which they should be named is described. They are then practiced in succession, the teacher calling for them as the *doh*, *fa*, *doh*, *soh*, *doh* chords, and after this sequence has been learned the middle *doh* chord can be omitted, the choirs passing directly from the *fa* chord to the *soh* without a tone in common. This sequence should be practiced starting with the *doh* chord first in its A position, then B and then C. While the chord succession will be the same, the positions in which the chords follow each other will be different, obliging the student constantly to think not only of the tone that is common to the chords, but of the nearest tone that they should sing so as not to interfere with the tone that belongs to one of the other choirs. While this work may be started with the use of the syllable names, as soon as the tones are definitely learned the syllable names should be omitted, and the various vowel tones practiced. This is especially necessary in studying the effects of the chord.

The exercises can be varied by having three of the more musical pupils sing the chords from a sequence written for them, the class naming from hearing the chord and its position. This gives opportunity for excellent ear practice, especially for classes who have not the opportunity of hear-

ing a piano. The sustained way in which the tones are sung are better even than when given on a piano.

The fourth step is the practice of the minor chord (see page 139, Ex. B, I, II, III, IV). The *doh* chord is again taken to start with, but instead of changing both of the upper tones only, the *soh* is changed to *la*, resulting in the *doh, mi, la* chord. The pupils will immediately recognize that this resembles in quality the minor scale with which they are familiar. After the chord has been practiced in three positions there will be no difficulty in seeing that it should be called the *la* chord. The fact that this chord has two tones in common with the *doh* chord would justify its being named the relative minor to the *doh*. The *ja* and *soh* chords are then treated in the same way, and it will be discovered that each has a similar minor chord, one on the second degree of the scale related to the *ja* chord, and one on the third degree related to the *soh* chord. We thus have six chords,—three major with their three relative minors.

It is now possible to make long dictations combining all six chords. Such dictations will come easily if they are first written out on the blackboard, the pupils first suggesting the chords that will follow each other well, such suggestions being tested by singing and comparison.

By starting on different positions of the *doh* chord a large variety of movement can be obtained. By writing the chords in different keys, excellent practice is obtained in realizing the similarity of effect in different presentations to the eye.

The fourth step is to practice on the four-toned chord

of the dominant seventh (see page 140, Ex. D). The pupils will have already discovered that the three-toned chord on the seventh degree of the scale sounds different from both the major and minor chords learned. But by adding *soh* to the three a very interesting and, at the same time, commonly used chord results. In order to practice this it would be necessary to double one of the tones of the *doh* chord. The most likely one for such a purpose would be the tone that gives its name to the chord. The four-toned chord of *soh, ti, re, fa* is then practiced in the position of *re, fa, soh, ti* between two *doh* chords.

While this work is not exhaustive from the harmonic point of view, it is sufficient to give most valuable practice in tone hearing, and supplements not only the work in part singing, but develops a most sensitive feeling for harmony, making a deeper appreciation possible.

ILLUSTRATIONS OF THE FOREGOING CHORD EXPLANATIONS



A I. Finding *fa* or subdominant chord.

II. Finding *soh* or dominant chord.

III. The three chords in combination.

IV. The cadence, leaving out the middle tonic chord.



- B** I. Finding *re* or subdominant minor chord.
 II. Finding *mi* or dominant minor chord.
 III. The three minor chords in combination.
 IV. Leaving out the middle minor tonic.



- C** I. Showing chords studied as constituents of tonic key.
 II. Showing chords studied as tonics in related keys.
 a, d, and e—tonic, subdominant, and dominant keys.
 b, c, and f—minors related to above major keys.



- D** Showing the inclusion of *soh* with the *ti, re, fa* chord.

SECOND STAGE: KEY RELATION THROUGH SIGNATURE *

There remains but one more technical stage to be presented. We have had in the fifth year work the technical aspects of tone production, the minor mode and its resultant scales, and so far for the sixth year, chord characteristics, both in themselves and in their relationships to one another.

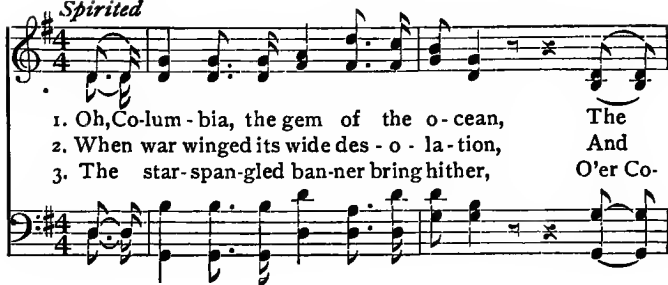
The idea of the key group is the last of the technical subjects which need be attempted in this phase covered by the fourth, fifth, and sixth years.

* See discussion introductory to second stage in Chapter XII.

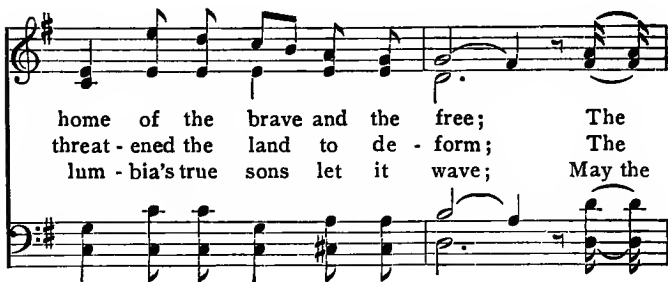
The principles of this relationship are already familiar. The children know that every key signature stands for two keys, one a major or *doh*, one a minor or *la*. The keys have also been introduced as *soh* and *fa* keys in relation to a *doh* key. The pupils have had plenty of experience in the relation of these keys. They have used *soh* as a new *doh* and then changed it back to *soh*. Still oftener the sound name has remained unchanged, but *soh* has taken the *doh* feeling because *fi* has been sung instead of *fa*, showing that short change has been made to the key of *soh*. The aim of the work now is to gather together and formulate as much as has been experienced in key changes. For this purpose, a large number of familiar songs will be taken and the keys to which they change marked on the blackboard. The children discover that each key change has a chromatic tone that serves as an earmark by which the eye, on looking at a piece of music, can readily tell the key modifications that occur. It should be noted here that a great many of the chromatic marks which occur in the ordinary music of the public schools only suggest a possible change. They are useful in helping to articulate the tune, to break it into parts. These changes are so common and uniform that to understand their principle helps not only in reading but also in hearing music.

To illustrate the two ways in which the chromatic tones are introduced, the children can sing *The Star Spangled Banner*. They will notice that many of the phrases end on the chord of *soh*, or the dominant, and that some of these are preceded by a chord having a sharpened four in it,

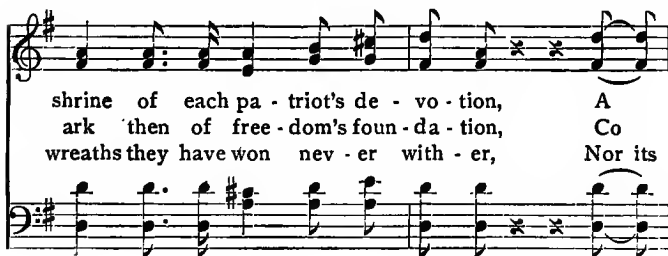
COLUMBIA, THE GEM OF THE OCEAN

Spirited


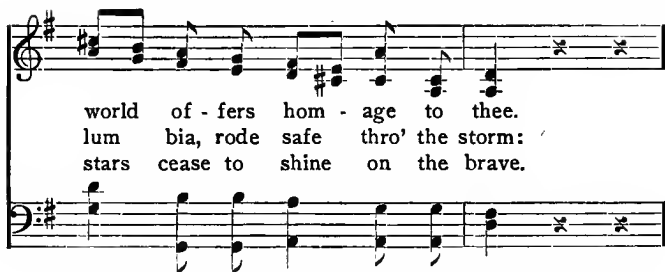
1. Oh, Co-lum - bia, the gem of the o - cean, The
2. When war winged its wide des - o - la - tion, And
3. The star-span-gled ban-ner bring hither, O'er Co-



home of the brave and the free; The
threat - ened the land to de - form; The
lum - bia's true sons let it wave; May the



shrine of each pa - triot's de - vo - tion, A
ark then of free - dom's foun - da - tion, Co
wreaths they have won nev - er with - er, Nor its



thus making the *soh* chord that follows it in strong opposition to the *doh* chord of the piece. The children observe that what follows is in the original key and that what has happened has served merely to emphasize the separation of the phrases. Now *Columbia, the Gem of the Ocean* can be sung, and it is found that in this also the fourth of the key is sharped but that here it continues through the passage. Hence the music is changed to this key.

After singing in different keys a large number of examples which illustrate the sharpening of the fourth, the children realize that however different the end served, the means employed is the same, and, moreover, that the change is one of the most common in music. They have also noticed that when the return is made after singing in the key of *soh*, the sharped four of the old key that became the seven of the new, often required a modifying mark such as cancel or flat to show this return. The ear always feels the difference, but very often the context is so clear that the change is not represented to the eye, the original signature being sufficient. This is true of the return in *Columbia, the Gem of the Ocean*. Furthermore, illustrations

should be given of the fact that when we wish to return from the key of *soh*, we flat the seventh of this key.

A tune can now be taken in which, instead of first changing to the key of *soh* the seventh of the key of *doh* is flatted; and the children discover that the key of *ja* has been reached. Thus what they are already familiar with as a change from the dominant to the tonic is applied to the change from the tonic to the subdominant, a transition which occurs much less frequently (see page 140, C, II, a, d, e).

After the formulation of this group of related major keys, the next step is to study the relationship to a central tonic of the relative minors, i. e., the keys that have the same signatures but use *la* instead of *doh* for the tonic. From their study of the relative minor of the tonic the children already know the principle of this relationship. It is difficult to find melodies that give sufficient illustration, but examples will occur in the three-part music which is being studied.

It can now be shown that when we pass from the key of *doh* to the key of its dominant, or *soh*, we are passing through only one aspect of this dominant key, that is, the major; and that we can with equal consistency go to the dark key for the same signature, that is, the minor, which has the same relationship to *soh* that *la* had to *doh*. This would be the minor starting on *mi*, the third of the scale. The same thing would hold good in changing from the *doh* to the *ja* key. Instead of taking the bright aspect of this group of tones we can take the dark aspect represented

by its relative minor commencing on *re*. Thus we have minor keys on the third and second of the scale which are related to *doh* in that they would have the same signature as the majors *soh* and *fa* (see page 140, C, II, b, c, f). The formulating of these key relationships is especially valuable because while they all follow the same principle each has a different appearance to the eye. Sometimes cancels instead of sharps show the change to the key of *soh*, and similarly they, instead of flats, show the change to the key of *fa*; or again, double sharps or flats may be required. So if the chromatic tones necessary to form the melodic and harmonic minors for the three relative keys were learned in reference to a central tonic, many a passage that seems to bristle with tonal difficulties would be recognized as a familiar friend.

The point of all this work is the study of key changes in relation to a central tonic. Thus we have a group of six keys represented by three signatures, one of which is that of the tonic, one that of the dominant, and one that of the subdominant. When we change to the dominant and subdominant, or the *soh* and *fa* keys, the signature is not changed; only the chromatic necessary to form the new seventh or fourth is written. The dark aspect of the major keys gives us the three minor keys, one on *la* related to *doh*, one on *mi* related to *soh*, one on *re* related to *fa*, so that the six keys have all to be learned from the same signature (see page 140, C, II). Each of these minor keys requires an additional chromatic tone showing that it is the dark and not the bright aspect of the group. This tone is the

seventh of each minor, that is, the tone below *la*, the tonic. This seventh when sung with the sound names of the original tonic will require *soh* to be sung as *si* indicating the change to the key on *la*; *re* to be sung *ri* for the change to the minor key on *mi*; and *doh* to be sung as *di* for the minor key on *re*.

Thus the chromatic tones are introduced as indicating a group of six keys, all related to the central tonic as the seven tones of the scale are related to the tonic tone.

This study might be continued to include the tonic minors of the major keys, but sufficient work is given here to establish the principle that keys are related, as tones are. In fact, it might be enough in a great many cases to go no further than the changes to the dominant and relative minor. None of this technical work that cannot be related to practical musical experience should be done. It can be justified only when it serves to formulate practice.

CHAPTER XIV

INTRODUCTORY TO SEVENTH YEAR: TWO REASONS FOR CHANGE IN CHARACTER OF WORK

THE work of the seventh year will be better understood, if, before describing it, we compare what it aims to accomplish with the two previous aims, the one extending through the work of the first three years, the other of the next three. The first phase begins with singing songs and ends with learning notation. This is brought about by observation, acting and picturing, which accompany the singing, and enable the pupil to learn the constitutive ideas that make up the structure of the song. In the second phase this process is reversed. The pupils start with the constitutive ideas suggested by the notation, and unite these in order to form concepts of the motifs and phrases of musical passages. The ability to sing these is the practical test of accurate conceptions.

The question now arises, shall this grade continue the work of sight singing in the same spirit as during the second phase, or are there reasons for a change? If the nature of the pupil remained the same, and if work in sight singing included all that pupils should know about

music, there would be no necessity to change. But both these hypotheses are contrary to fact.

The adolescent period into which the pupils of the seventh and eighth years are entering produces self-consciousness and sensitiveness as to the opinions of the other sex, evident in dress and manner. With this external change there is more profound intellectual and spiritual change, the significance of which is clearly brought out in Dr. Hall's *Adolescence*. The voices of the girls are affected as well as those of the boys, and this makes it wise to lessen rather than to increase the use of the voice, especially since its exercise gives poor results. The self-consciousness that particularly affects boys makes vocal utterance a difficult and hence undesirable form of self-expression. Pupils at this period feel a dislike for "stunt-doing" acts, which in the earlier music study were both helpful and enjoyable. Furthermore, they demand a certain spiritual content, a social significance in what is done. These facts alone would justify a new grouping and presentation of study.

But there is still the second reason to be considered. Does the training in sight singing cover all that the general public should know about music? The pertinence of this question will not be felt unless we bear in mind that the majority of our citizens end their school work with the eighth grade or its equivalent. The tone thinking that sight singing demands gives the most intensive ear training, and hence the best preparation for grasping musical ideas. Yet the interest awakened in music simply on its vocal

side, and the musical work that such vocal approach makes possible, do not supply a wide enough experience to enable the student to apply in the most effective manner the ability he has gained in this way to the musical experience of his later life. The modern graduate of the grammar school when he enters upon life, works under a pressure that leaves little vitality for either spiritual or artistic expression, and those forms of art that require severe concentration and effort are left more and more to those persons who have special talent for them. The desire for self-expression is as great as ever, but the medium through which it acts must hold attention without too severe a demand on vitality that is already overtaxed by the pressure of modern life. Hence the general experience in music will be more likely to take the passive form of listening than the active one of solo or chorus singing.

The truth of this statement will be appreciated if one will only stop to think how very much larger is the number of those whose musical experience comes to them through the work of others than of those who make their own music. In fact, of the latter class, the technical demand of the music they themselves produce may so absorb their attention that they are oblivious to the æsthetic side; so that they also nourish their true musical life through what they hear.

If now we ask what form of the music which brings us intimately into contact with the great masters do we hear most, one must admit that it is instrumental music. Apart from what is heard in the homes (so wonderfully enlarged

by music printed on rolls and disks), we have the music of the streets, parks, pleasure resorts, steamers, hotels, restaurants, and, in addition, the regular concert halls, all ministering very largely through instrumental forms. This, after all, is the musical opportunity for which the public schools should train. For whether this immense amount of music shall be good or bad depends upon what the musical intelligence of the listener demands. The public school can become a most potent factor in training this intelligence.

After the training already given, it only remains to apply to the practical sphere, in which the greater part of the future experience of the pupils will lie, that intelligence and sensitiveness to sound which sight singing has awakened and strengthened. Such is the aim of the work beginning with the seventh year. Starting with the ability the pupils have developed for conceiving of motives and phrases, the teacher shows how the larger vocal and instrumental forms are developed through a combination of these. The school should furnish the opportunity to hear instrumental music, and it should definitely organize the experience given. By this means, the pupil is enabled to enjoy music that would otherwise have little meaning for him.

CHAPTER XV

THE SEVENTH YEAR

FIRST STAGE: REVIEW

As the majority of the school population does not go beyond the grammar grades, it is essential that the musical work should be so planned that it should not be dependent on study beyond these grades for results. Hence the work of the third phase according to the plan presented in this book, covering the seventh and eighth years of school life, is designed to accomplish two main results.

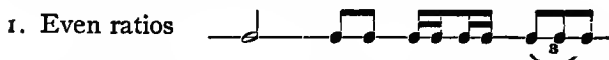
The first of these is to review and solidify the musical knowledge already introduced; and the second is to widen the scope of the musical work so that some interest will be awakened in instrumental music as well as in the story and form of music.

The review work does not signify that exhaustive reviews have not already taken place, but that the review itself is to be made more of a feature and presented not so much in the form in which the work was originally given, as in generalizations, implying that the principles are fairly well in mind, and putting the knowledge into such compact shape that it would be of service long after much that was learned in school is forgotten.

The review for the seventh grade centers about the notation for rhythm and pitch. The first will be best illustrated by the following table.

Typical movements to be memorized.

(a) Simple grouping, with the quarter as unit.



(b) Compound grouping with the dotted quarter as unit.



It will be seen by this table that the pulse and not the measure is taken as the unit in the measurement of tonal duration. It is quite true that in simple music moving to single pulse tones, the measure grouping is of the utmost importance especially to an unharmonized melody; the ordinary melody, however, will establish its own pulse grouping if the pulses themselves are clearly conceived and produced. By bringing the compound and simple, the even and uneven pulses into juxtaposition, the whole table is easily classified and remembered, and while it is not by any means an exhaustive treatment of pulse types, it is fundamental, and students who have mastered it thoroughly, easily grasp further changes. This table

should be put on the blackboard and the pupils tested by having the teacher point to the various pulse types, while the pupils sing them in monotone. The teacher should also sing the various types while the pupils state which one of the tables is being produced, and so the new music taken up should be rapidly analyzed, at least the first few measures, into the pulse types employed, until the importance of thinking by pulses is thoroughly reviewed and established.

The certainty of the pulse feeling itself can be easily tested and developed by the practice of syncopation, starting first in two-pulse measure and having the syncopation last from the last half of the first through the second half of the second pulse, when the pupil can feel the entrance of the weak pulse against the tone that continues over it. The syncopation can be changed to the last half of the second pulse over the first half of the first pulse of the next measure. Here two forms of syncopation are given: the first covering the entrance of the weak pulse, and the second, that of the strong pulse. Such exercises may be effectively introduced in scale passages, alternating with the regular movement, such alternation of a few measures of syncopated and regular time making the work more effective than where the syncopation is kept up too long.

With this practice of pulse types and pulse grouping the various forms of the metrical signatures should be reviewed; especially those decided changes in appearance that simple time so often takes from the mere fact of changing the pulse unit from a quarter to either an eighth or a half note.

Turning now to the work that centers about the key signatures, it will be well to commence this review by singing the pitches of the staff as represented by the unmodified letters. Excellent practice in singing whole and half steps is brought about by singing scale passages, starting on all the letters with the exception of C, when the fixed condition of the half step between E and F, and B and C is well established. The scales should be sung and written, starting on each degree of the staff. For instance, a scale calling C first *doh*, then *soh*, then *mi*, then *la*, *re*, *fa*, and finally *ti*. This would require that between C' and C'' the scales of C, F, A flat, E flat, B flat, G and D flat be sung and written. The same thing should be done by taking D and thinking of that as each of the seven tones of a major scale. This gives an exhaustive review of the scales and the exact function of sharps and flats, double sharps and double flats with reference to the staff. In writing these scales the modifying signs should be written directly before the note, and the distance measured in major and minor seconds; and afterwards, for practice in writing signatures correctly, the resulting signatures should be placed at the beginning.

The second most important practice in connection with signatures is the ability to place rapidly upon the staff when the key is given the repose tones of the scale *doh*, *mi*, and *soh*, with the *doh* above and the *soh* below this group. This can be made very intensive speed work by sending all the pupils that can be accommodated to the board, having them draw a short staff and place the clef mark;

then stand with the back towards the board and have the keys assigned, and at a given signal have the students turn about, place the five notes according to the key required without stopping to write the signatures, and then turn back again. The habit should be developed of not simply thinking where *doh* is when the key is given, but where the entire seven tones would be placed. These are easily grouped if they are thought of as the repose tones of *doh*, *mi*, and *soh*, as the sensitive tones of *fa* and *ti*, one leading up to *doh* and the other down to *mi* and the passing tones of *re* and *la*. The essential thing of this work is, however, grouping the five repose tones *doh*, *mi*, and *soh* with the *doh* above and the *soh* below.

So much for review. The vexed question of part singing raises a difficult problem. There is no doubt that singing in harmony is one of the best musical practices that the pupil can have, and that the result when well done gives greater satisfaction to the officers and friends of the school. On the other hand, the vocal condition in which seventh and eighth grade pupils find themselves is the least favorable for such practice, and a great part of the harm which singing teachers often attribute to school music is done in injudicious part singing for immature voices. Unfortunately the greatest damage is done to the best singers, who are generally given the lower and constrained parts because they are more musical and can sing them, and from this very fact are depended upon to lead the others, and unconsciously force their voices. The question of part singing might be looked at from two points of view. The

first, that in which independence is developed by having other parts moving differently from the one the pupil is singing, and the second, the development of feeling for harmonic progression. If these two are treated separately, more effective work can be done with less harm to the voices. The question of independence with reference to the part one is singing is easily developed through the round and canon. This does not oblige any voice to remain low, and thus offers all the freedom of unison work and at the same time develops independence of part.

For developing harmonic feeling, simple songs should be chosen, where the harmony moves in blocks, the low voice taking the root, or a tone of the chord. Opportunity is thus given to the embryo basses to take their tones with a fair degree of certainty. This would throw out much of the clever counterpoint that one sees written for advanced grades, but when the musical capacity of the pupils is taken into consideration, the necessity of passing from the simple to the complex would certainly justify a much more elementary harmonic treatment for the first attempts at part singing than is ordinarily offered to the seventh and eighth grade pupils. If this work is supplemented with the singing of canons, plenty of practice is given in getting independence of parts. Such simple treatment of harmonic movement is not only valuable for the low part, but quite as much so for the soprano and alto that move above it, for it is unfortunate to set pupils to singing parts who have not yet developed the simple

tonic-dominant movement that lies at the base of the more developed treatment.

SECOND STAGE: AWAKENING INTEREST IN INSTRUMENTS

The new work is to awaken interest in musical instruments. How this is to be done will depend much on the opportunities at hand. An ordinary whistle is sufficient to introduce the principle underlying wind instruments,—the flute, piccolo, pipe organ, and others. When the principle of this group is established, i. e., that the sound is produced by the blowing of the wind across an opening, the second division of wind instruments can be introduced by means of the cornet. Pupils notice here the cup-shaped mouthpiece and discover that the lips of the player must vibrate in this cup in order to produce the tone. Then the whole family of brass instruments can be studied and the fact brought out that the tuba, trombone, horn, and trumpet all employ the same means. After this group the third division of the same family can be introduced,—that of wood instruments such as the clarinet and oboe. The children observe that here the wind is set in vibration by a reed controlled by the lips of the player. Another class of instruments which use the reed,—but instead of controlling it by the lips, allow it to vibrate freely in an opening,—can be illustrated by the cabinet organ, accordion, or mouth organ.

The second great family of instruments is the string group. The violin can be used to illustrate the large division played with bows, while the guitar, mandolin, and

piano exemplify those where the string is plucked or excited by a plectrum or a hammer. Finally, there is the third great family, such as drums, tambourines, and cymbals, where a vibrating surface is directly excited by blows.*

Since the object of this work is to awaken interest in music through instruments, it is not pursued in a professional or technical way. On the other hand, human interest in the subject should be stimulated by including as much of their history and their place in literature as time will permit. Thus some of the pupils may prepare papers on primitive music, showing how drums were used; others fresh from their essays on Greek life will describe the pipe of Pan and the lyre, showing their relationship to modern instruments; others again, the shepherd's pipe, the hunter's horn, the bugle and its calls, and the bagpipe with its drone; until the world-wide interest of the human race in music is recognized. Much of this literary work can be done in connection with the exercises in English and composition as well as with history.

But this is not the only side. The seventh and eighth years pay much attention to manual training. The making of simple instruments and the invention of apparatus for illustrating how the tones are produced will fascinate many an ingenious boy whose interest in music hitherto has been none too strong. In like manner drawing and art can be made to contribute their quota in the reproduction of the beautiful forms and decorations that musical instruments present.

* The pupils, as far as possible, should hear and examine instruments.

Museums are rapidly increasing and children should be directed to these as they are to libraries. Failing such aid, general and musical encyclopedias supply more material than can be used. The musical instrument catalogues of a first class house that deals in orchestral and band instruments will supply fairly satisfactory pictures of the instruments most commonly used; these could be cut out and pasted on cardboard for permanent use.

For two months half the music time of the week could well be devoted to this sort of work, in the course of which practical hints could also be given for the care of the musical instruments generally found in our homes.

A second feature of this work consists in drawing attention to those instruments, which, though less used, are at the same time important for instrumental organizations. A fraction of the time that is now spent in trying to get the technique of such a difficult solo instrument as the piano, would if applied to band and orchestra instruments, give more musical results. Much of our musical activity is dissipated because almost everybody tries to master the piano, an instrument so complete that it does not readily lend itself to organizations of players. If these streams of individual effort could be united into clubs, small bands, and orchestras, the musical life of our country would be greatly developed and enriched.

The public school wields an unparalleled influence in this respect; for the study of musical instruments gives the opportunity to interest the pupil, not only in the instruments themselves, but what is important for instruction, in

organizations, to which these naturally lead, such as the band and orchestra. The pupils learn that these are not haphazard combinations, but thoroughly organized bodies, each class of instruments having a specific place and duty in the whole. They know what chords and melody mean and they learn to see how the different instruments, according to their nature, take up the parts; they learn the bass, tenor, and alto groups and observe that certain instruments, owing to their flexibility and beauty of tone, carry the lead, or melody.

There is hardly a town or mining camp in the country that has not its band, or at least a group of instrument players, who might be induced to give a concert for the pupils, illustrating to both eye and ear this grouping of instruments. The modern school sends the child into the park, the country, the factory, and the shop to gain knowledge by first-hand observation, and the same principle can be applied to music work. With the interest now developed in instruments and their organization the pupils should be encouraged to go to good concerts or wherever music can be heard, and to bring back definite observations of effects produced and means employed. These comments should not be in the form of haphazard criticism or rhapsody, but should show a scholarly intelligence, even though this is still limited and immature.

THIRD STAGE: BAND MUSIC

We have seen how the arousing of interest in instruments led to the awakening of interest in musical organizations.

This naturally goes on to the present stage, the music that such organizations perform. All over the country bands are much more numerous than orchestras, and in band music the dance forms predominate very largely. Since these forms lend themselves to observation and awaken a more immediate interest, they should be studied first. The children have learned to listen by motif and therefore have no difficulty in tracing the occurrence of similar rhythms and the reintroduction of similar melodies after contrasting ones.

After observations have been gathered concerning the nature of what they have heard, the study of the dance form will be systematically commenced with the aid of the school piano. Often among the pupils themselves some will be found who are capable of playing the illustrations. It certainly would not be difficult to persuade musical friends, or even piano teachers who are interested in being known as players, to give illustrations. The modern attachments for playing pianos make possible the giving of excellent illustrations by those who do not themselves play. If it happens that the school has no piano, a few musicales can be planned at different homes.

Attention will be directed first to the way in which dance music consists of parts related to each other. If a wide-awake physical training teacher is connected with the school, her services can be enlisted in showing how this articulation of the music grows out of the dance. It will be found that the means employed, or cadences, can be grouped. Some seem to be final, others only partial. In

noting how this is accomplished by means of chords and their arrangement, excellent opportunity is given for reviewing previous chord work and for learning how cadences may be formed and infinitely varied. The development of sensitiveness to the shades of difference which mark the division between motifs, phrases, sections, and periods, increases intelligent comprehension of music in the same way that attention to punctuation promotes an understanding of language.

After the pupils have observed that dance music breaks up into symmetrical parts, it is not difficult to go a step further and show that these parts are dominated by certain rhythms producing forms like the polonaise and polka, tarantella and galop, waltz and march. The pupils now discover that these forms are types of movement and soon learn to recognize them. These types, as in the case of the instruments, can be associated with their historic origin. Here, again, literature and art enrich and widen the musical interest and awaken a deeper pleasure than the mere sensuous reaction to a waltz or march could ever do.

This approach through the dance makes it possible to induce interest in the form without having the study become a lifeless intellectualism leading either to disgust or priggishness, for seventh grade children readily respond emotionally to the minuet or waltz. They enjoy it; it expresses them: and the intelligence awakened in connection with it purifies and strengthens their interest and prepares at the same time a starting point toward more complex and artistic forms. The *Invitation to the Dance* used as an

approach to the overture of *Der Freischütz* is a better arrangement than the reverse order would be.

While the suggestion made here is to pass from instruments to music, it does not necessarily follow that this is the best order in all cases. The fundamental idea is to pass from experience to knowledge,—to make knowledge the organization of experience. That order which will supply this experience in its most vivid and interesting way for the conditions of the given locality is the best one to follow, even if the logical development of the subject itself may not be so well served.

CHAPTER XVI

INTRODUCTORY TO THE EIGHTH YEAR WORK: REPETITION IN ART

By the time the pupil has reached the eighth year, we are ready to apply his already awakened interest in musical form to those examples in which the masterpieces of music have been revealed, and also to arouse his sympathies by an acquaintance with the composers themselves and the times in which they lived.

Though this work naturally falls in the eighth year it does not follow that it can be completed there. Only the beginning of it can be attempted in one year. Not only this, it must be borne in mind that approximately half the time of the eighth year will be devoted to singing. The closing exercises, as well as many other school occasions, require special music and the duty of furnishing this generally falls to the upper classes. These are excellent opportunities for putting to practical use the pupil's musical ability. The teacher should take pains to have the selections well chosen, and should approach their study through the observation of structural and interpretative ideas. Moreover, attention should be given to the circumstance under which the pieces were composed, as well

as to the period and the composer. Thus the pupil can be made acquainted with many beautiful gems from the literature of music in such a way that they become part of his artistic preparation for life, enabling him to drink deep of refreshment as invigorating and inexhaustible as the springs in a mountain valley.

Since, as we have already said, the pupil's musical experience after he leaves school will be largely in the realm of hearing instrumental music, the preparation for this, already begun in the seventh year, should be continued. Let us see what this preparation has been. First, his musical interests have been broadened through an acquaintance with the structure and history of instruments. This has led to an interest in musical organizations, and this in turn to the music performed. As this music was chiefly limited to dance forms, the observations made were largely connected with its rather rhythmical ideas. Pupils have become aware of the symmetry of these musical designs growing out of their origin in the dance. Their observation has been carefully directed to the means of articulating the music. This has led to the quickening of the feeling for cadences, which were explained descriptively rather than technically. These observations, together with the earlier practice of singing by phrase give the basis for the new work about to be presented. Starting with that which not only awakens interest most strongly, but also connects most closely with experience, we have led the pupils to the technical means employed to produce this experience, and we gradually

reach those forms of music the comprehension of which adds much to musical enjoyment.

The plan for the observation of pure design in music has been developed in connection with work done by High School students. But its commencement with the last year of the grammar school is suggested for children whose school life goes no further. Even eight periods during the year devoted to the work proposed in the following paragraphs would prove of immense practical value to such children. A lesson once in two weeks would be much more effective, while a lesson once a week would give all the time necessary to accomplish what we intend in the work as sketched. It is not expected that the pupil will be able to comprehend the full meaning of large forms represented by fugues and sonatas, since at this age he possesses neither the intellectual nor the emotional capacity. But just as a child learns much in his geography, which becomes fully significant only after years of travel, so in music by drawing attention to the effects of fugues and sonatas and the way they are formed, by giving practice in intensive listening and awakening human interest through the stories connected with their origin, the times, and the composers that produced them,—in all these ways are planted the seeds which will bear fruit whenever favorable opportunity is given.

In teaching musical design, the pupils' experience of design in manual training and art work may be made use of. This helps in a measure their lack of a larger musical experience. Since such a treatment is rather unusual, the principles will first be presented by themselves.

The tendency to repeat is strikingly noticeable in all the arts that seek to express beauty. By this means unity is given to a work; yet mere unity is not beautiful. Its value consists in enabling us to organize the forms of art, and consequently the impressions they produce, thus making possible the accumulation of effects necessary for the deep and lasting feeling of pleasure which the beautiful awakens.

The importance of this principle of repetition is very great in those arts that are free to develop their own forms; as long as they can give the impression of the unity of the whole, they can take any shape the fancy wishes. Among these arts are music, architecture, and a large class of the arts of design, such as deal with surface decoration. In contrast stand the arts of painting and sculpture; these have to develop the unity of their work largely through choice and arrangement of forms already related by nature.

In those arts where repetition is absolutely essential for attaining unity, two classes result from the way it is used. In the first of these, the unity attained resembles that developed through continuity, the same motif or form being present in more or less altered forms. This class, involving more or less constant repetition, is one in which much of the primitive art of the world is expressed. Stonehenge with its rows of huge stones; the arts of Egypt and Asia with their constant recurrence of such large masses as pillars, gates, and sphinxes; decorations on garments and utensils where a simple figure appears over and

over; and in music, the endless reiteration of some minor phrase in which the Indians and Orientals seem to delight;—all these indicate the symmetry of the whole is little thought of, but that attention is given simply to the accumulation of effects from moment to moment, sufficiently gathered up by their resemblance to each other.

In the second class, the same continuity is present, but through greater skill in the control of the material a higher unity is made possible by consideration for both symmetry and principality. The builder of the Parthenon was not content with the simple continuity brought about by representation of details, but he so planned his work that the structure as a whole expressed a higher unity through its symmetry. The capitol at Washington goes a step further in organization, in that its large masses are connected by means of the idea of principality; for the huge dome at the center unites its wings in one whole.

The difference between these two classes is illustrated in the way such buildings are approached. The architects of Gothic cathedrals, Egyptian and Oriental temples, in which the continuity idea was uppermost, laid little stress upon the point of view from which the whole should be seen. Houses of the city crowd about a Gothic cathedral, walls and gardens hide the temples; they are not primarily intended to be viewed as wholes. On the other hand, the Parthenon, the capitol at Washington, and the Taj Mehal, all are meant to be regarded in the large as well as in detail. Their attainment of this higher unity implies a greater skill and maturity of their builders.

So in music these two classes of repetition are present; that where continuity is uppermost took its rise in the ecclesiastical music, while the feeling for symmetry connected itself with the folk music and dance. Each had its peculiar problem. The church musician could spin tone webs indefinitely, but found difficulty in organizing his material, so as to bring about that unity which results from symmetry and principality. On the other hand, in the spontaneous song and dance of the people, there were perfect examples of symmetry, but there was no way of massing these effects into larger wholes. These two classes, however, developed side by side, each influencing the other. The first, under the general term *polyphonic* music, achieved its continuity of effect by the recurrence in the various voices of similar motifs or phrases. The second, sometimes called *homophonic*, aimed at repeating large portions separated by contrasting parts, thus giving to the whole an organic unity, a feeling of symmetry, as far as this is possible in music. In many of the Händel choruses we have in the polyphonic treatment with the emphasized chords at the close what corresponds to the Cologne cathedral with its mighty towers at its western end; while in the movements of the sonatas of Haydn and the simpler ones of Beethoven there is a more distinct feeling of symmetry and proportion. Yet it is interesting to note that in the culmination of both of these types, the more formal symmetry of the earlier Beethoven sonatas disappears in a deeper thought unity, and in the great fugues of Bach the apparent principle of continuity is so deftly

controlled that the work presents the large proportions of beginning, middle, and end, characteristic of works of symmetry.

To sum up and show the application of what has been said with reference to design: attention has been drawn to the importance of repetition, by showing its use in other arts besides music; the observation of repetition has brought out the distinction that enables us to divide art products into two large classes. In the first of these, continuity is given by the repetition of a few simple motifs with more or less variation constantly appearing. In the second, a feeling for symmetry and principality results in modifications for the sake of the whole, and in the repetition of large portions varied by a contrasting element.

The reason for dwelling so largely on the expression of these principles in arts other than music is that in the space arts, the way repetition is employed is more easily studied and can be made clearer to the mind, than in music, where design must be heard instead of visualized. When the universal value of this principle for all art is once felt, its application to music greatly assists in comprehending the various forms. It has the further advantage of showing that music instead of making its object the attainment of a formless feeling, really gains definite results by as rigid an adherence to principles of structure as does architecture.

In applying this work to students as young as those of the eighth year, the use of design in the other arts, especially to illustrate the principle of repetition, is expected

to accomplish nothing more than to start them listening intensively to what they hear. It will be noticed that this comprehensive view of form is presented before the work is given for intensive listening to the musical sentence itself. The purpose is to follow the principle so often emphasized in this book,—the passing from the larger, the more obvious, the more superficial expression of the subject to a closer, a more minute, and more vital study. For the same reason, the study in relation to text precedes the work given for the general observation of form. In no case is this attention to form to be thought of as a study of the subject itself, so often attempted in appreciation classes. Such work would be inappropriate for pupils at this age.

CHAPTER XVII

THE EIGHTH YEAR

FIRST STAGE: REVIEW

THE review work of the eighth year continues in the same spirit as that of the seventh. The essentials of the previous year should be gone over, the knowledge of the thirty major and minor keys should be grouped into a complete table. The pupils should observe that there are but seven different degrees on the staff. Taking the series from C to B inclusively, the letter F divides it squarely in two. This is the only key starting on an unmodified letter that has a flat in its signature. Below this, C, D, and E stand for no sharps, two sharps, and four sharps. Above, F, G, A, and B stand for one sharp, three sharps, and five sharps. The letter F with one flat for its signature divides the sharp keys into two groups, naught and even on one side, odd on the other. From these we can get all the other signatures by remembering that all that we need to do is to subtract the signature given from seven and we will get the one sought. For instance, the key of F, one flat, by subtracting one from seven we get the key of six sharps or the key of F sharp. If the four sharps of the key of E are subtracted from seven, the remainder, three, will give

the signature of three flats for the same letter. Thus each letter of the staff stands for two keys, one the letter by itself, the other modified by a flat or a sharp, and whichever is given the opposite can be discovered by the simple rule of subtracting this from seven. The letter C, however, as it has no sharps or flats can have either seven sharps or seven flats. That is, we can subtract the entire group of sharps or flats and so get its opposite.

Thus the letter C gives us three keys and the remaining six letters two each, resulting in fifteen key signatures. If we now bear in mind that each signature has both a bright and dark aspect, the dark taking its name from the color which predominates it, this being *la* or the third below the tonic of the major, we shall add fifteen minor keys to the same signatures, resulting in a group of thirty.

Following this review of the key signatures, there should come practice in recognizing the chromatic tones that suggest the modulation into the five relative keys; sharpening four for the dominant, flatting seven for the subdominant, sharpening five for the relative minor of the tonic, sharpening the second for the relative minor of the dominant, sharpening one for the relative minor of the subdominant. It will be seen that if these numbers are given from the basis of the original tonic, the ordinary transitory modulation will thus appear. Where the change is extensive, the chromatics necessary for indicating the dominant and subdominant signatures in connection with their relative minors will be necessary, as will also the changes for producing the melodic forms of the minor scale.

With the work previously done in the introduction of keys, this review can be easily covered. These chromatic tones can be practiced as passing tones by prolonging the diatonic tones. We thus have a chromatic scale introduced with a definite key feeling. When this can be sung truly instead of prolonging each of the diatonic tones, each of the tones of the tonic chord should be prolonged; that is, *doh*, *mi* and *soh*, while the minor seconds between them should be sung rapidly and lightly so that the key feeling may be constantly present. Finally, when this is done with certainty, the attempt of running the entire chromatic scale smoothly and evenly from a note to its octave may be attempted, but even then it should be thought of as in some key.

A new key relationship can be practiced by changing from the tonic major to the tonic minor. This will be best accomplished without the use of the sound names. The practice of noticing that the same tonic will generate a bright as well as a dark key feeling is an excellent expansion of a true appreciation of the full character of the tonic.

The cadences practiced in connection with the chord work in the sixth grade can now be practiced with the bass voices taking a low part, observing the effect of complete and partial cadences. With the preceding practice of the tonic minor the cadences could be taken in minor as well as major. What was said of part singing for the seventh grade is even more applicable to the eighth grade as far as condition of voice goes. On the other hand, those who

are able to sing have better command of their voices, and by singing with greater freedom are less likely to strain or contract the throat in an effort to produce the right tone. Hence, part work introducing modulation, giving opportunity for observing the characteristic key changes, can be effectively practiced. Much will depend upon how the voice is used whether injury is done or not. Light voice practice for developing flexibility starting from the upper tones and coming down is the only safe way for unchanged voices. While for those whose voices have changed, drawing attention to the gradual change in the way the tones are produced in passing from the chest to the head register between the pitches of A' and C'', will help to protect the voices.

SECOND STAGE: DESIGN IN RELATION TO TEXT

The new work of the eighth year will commence with that aspect of music so popular in modern times in which the thought of the listener is guided by means other than that of the music itself. A descriptive title, a bit of poetry, running comments relative to the nature of what is intended, act as suggestions to the listener. In *Pieces for Children*, by Schumann, *The Happy Farmer*, *The Poor Orphan*, *The Hunting Song*, *St. Nick* are all titles that aid the imagination in forming the image which the music seeks to present. The desire for such help is universal and persistent. The tendency to name pieces, even where the composer himself has not done so, as in some of Mendelssohn's *Songs Without Words*, or Beethoven's *Moon-*

light Sonata, is an instance of this. While to the lively imagination such aids seem like impertinences, most of us like the "boost" they give. The way in which the modern composer, even in his symphonic works, ministers to this tendency shows how keenly he appreciates its value. However this may be, it is certainly a great aid to the adolescent in giving content to his music.

If the teacher cannot play she will have to call on her musical friends or perhaps the students in the class; or, better still, for the scope of her illustrations, will be the assistance of a piano player. After telling something of the Peer Gynt story or refreshing the children's minds with the fairy scenes of the *Midsummer Night's Dream*, she will have Grieg's Peer Gynt suite or Mendelssohn's overture played. The zest which the human interest adds to the music will be clearly felt. So, too, the Wagner operas, especially *The Ring*, supply a rich mine for such illustrations. For here the great myths which so effectively portray the primal passions of mankind, and with which the pupils are already somewhat familiar from their literary study, gain an added interest from the way in which the great composer makes us feel anew their force and beauty.

But our education will lack its discipline if we stop with simply feeling, for such a limitation defeats itself. The mind must be awakened to observe the means employed, and through this perception still deeper feeling will be made possible. Let the teacher give as an example the opening of the Rheingold opera; the dullest, when

the association is made, will feel the flow of the mighty river. Now let her ask for the means used to produce this effect and all the previous experience and knowledge of the pupils will be immediately brought into play. They will appreciate the tonic chord, the way the effect is produced by the figure employed, the gradual stimulating of excitement through the increase in the number of tones used in the pulse. They become conscious of the simplicity of the means and the effectiveness of the result, and as a consequence become better musical judges. This is only one of many illustrative passages which that opera alone supplies. This continual inquiry on the part of the teacher (after the pupil has felt the force and beauty of the passage) as to how the result has been obtained not only raises such listening exercises to the level of the most intensive intellectual work elsewhere done by the pupils, but also leads to that observation of music necessary to place the pupil in a frame of mind which will enable him to take pleasure in the forms of pure music represented by the fugue and the sonata.

THIRD STAGE: PURE DESIGN IN MUSIC

In beginning the study of compositions where symmetry is uppermost, short and simple illustrations from Schumann, similar to those already mentioned, should be used. The children will listen to the *Soldier's March*, for instance, and notice that while the same rhythmic figure runs throughout the tune there is a passage in the center which is so differently treated that the impression is given of a

beginning, a middle, and an end resembling the beginning. They will find that in most music this principle prevails, but with infinite variety. In some compositions the middle may introduce an entirely new idea, while in the longer pieces, like *St. Nick*, each of the three divisions may be subdivided into three parts. Practice in the seventh grade has trained pupils to appreciate the delicate way by which is suggested the relation of these various divisions to one another.

As suggested in the previous chapter, it will be found a great advantage in grasping this idea of design if the teacher can illustrate how it is worked out under similar conditions in arts that appeal to the eye. Take the surface decoration, for instance,—such as book covers, rugs, and many embroideries,—where similar conditions that control music are exemplified. First, the design is not a likeness of any organic thing, as in the case of a picture or statue; but an organic unity is secured by so grouping and arranging the parts as to give the impression of a single whole. Second, the way this impression of organic unity is obtained can be graphically illustrated by observing a beautiful book cover, rug, or embroidery under the same conditions that we have in music; that is, not as a whole in either case, but in series, as we hear the tones of music in succession. Let the reader cover such a design with two pieces of paper, a narrow opening being left between them. Let him begin to observe with this opening at one side of the design and gradually move the papers until the opening has slowly traversed the whole. By looking

through this narrow slit while the papers are being moved he sees the whole design in succession exactly as he hears music; first the portion at the outer edge, then those sections which lead to the center, and finally the return of what was first seen. He will thus have observed a beginning, a middle, and an end similar to the beginning. By taking as examples a sufficient number of surface designs we can show that however infinite the variety there is yet a perfectly obvious principle underlying the grouping. The center of a book cover may be perfectly plain, the design being concerned merely with the edge, yet the unity of the whole is due to the relationship of the two. Or the arrangement may be just the reverse, the center having a design and the edges being perfectly plain, but again in this case the very plainness of the edge is necessary to make the whole effective.

So in a piece of music the first part may be important while the middle sinks almost to a transition passage: or, on the contrary, the first and last parts may consist of a few chords, seeming to serve merely as introduction and conclusion, while the middle contains the main idea, thus comprising the greater part of the piece. In Schumann's *Soldier's March*, for example, there is but one main idea coming in at first, but by a slight change of treatment in the middle and by the recurrence of the first idea at the end, the principle of succession necessary for unity is illustrated. If now we compare this piece with *St. Nick* we find that this middle part has changed from a mere variation of the first to an important and distinct feature

in itself. Thus the idea of repetition and the end it serves in producing the feeling of organic unity can be made clear both by graphic and musical examples. It must be borne in mind that the pupils of these grades are constantly employing this principle in much of their design work, both in manual training and in art.

The teacher can now draw attention to a method for bringing about unity in design, in which the aim is not so much symmetry as relationship of parts to a whole, the class described as polyphonic in the preceding chapter. Illustrations will again be found in surface designs,—such as carpets and wall papers,—in which a figure is repeated over and over, the idea being to give a similarity with variety to the whole, rather than to break the whole into large proportionate parts. Though borders are supplied they do not have the importance in reference to the design as they have in the preceding class. The same experiment of moving an opening over a part of a carpet or wall paper design shows that a given figure with its accessories keeps recurring. This figure may be extremely simple or may be quite complex with many complementary figures; but that feature which was most characteristic in the other illustration, the formal division of masses into beginning, middle and end, will be wanting.

Now if, as an illustration, a Bach invention or a Händel fugue is played a similar impression will be gained. The opening figure or subject, with others worked out from it, will be constantly appearing, but the formal limitation that requires the last part to be a repetition of the first is

not apparent. Although in Bach's fine works a subtle relationship of large masses is distinctly felt by the average listener, the piece moves on harmoniously with the contrasts that can be worked out from the main subject. It makes little difference whether the piece consists of twenty measures or two hundred, or whether the design covers yards and yards of surface or only a few feet; the principle is the same. The design has no formal limitation as when a border, center, and then border again were expected, as in the book cover, rug, or embroidery; of a first subject, second subject, and first subject again as in symmetrical music. Pupils will realize that repetition is the principle underlying both modes of attaining unity, but that in one case it is secured through symmetry and balancing of parts; and in the other, through continuity or the constant resemblance of the material to what has preceded it.

With this distinction clearly in mind a more systematic observation of polyphonic music can be begun. The children sing rounds and notice how the unity is developed through this style of repetition; canons and fugues are also played to them. Through all this they realize the necessity for grasping the initial subject. Their motif work has given them excellent training toward this end and they take a delight in seeing how Bach plays with his subject in an invention or develops it in a fugue. It is not necessary at present to take up the subject and counter-subject, stretto, and episode; it is the principle of knowing how to follow and the practice in following, which are the

aims of the work. We wish the pupils to be interested in listening; the ability to give technical names is not necessary. With this introduction to polyphonic music, pupils become familiar with Bach and Händel, learn something of their lives and the times in which they lived, and are able to connect a few characteristic compositions with the composers' names.

The pupils are now ready to observe the sonata form. The necessary introduction has already been made by developing the idea of repetition in connection with design. By starting with the polyphonic school the connection is made with the historical development of music. Examples can be played from the Bach suites, where, in spite of the polyphonic style, the principle of symmetry is present; for a double bar near the center indicates the second part as balancing the first, and the change of keys at the end of the first part and the working back at the commencement of the second part suggest, though rather vaguely, what the pupils have already observed as fundamental to those forms of music controlled by the idea of symmetry.

Passing from these to the simplest illustrations of Mozart's and Haydn's sonatas, the contrast between the old idea of continuity and the new idea of proportion and symmetry that these examples illustrate is strikingly brought out. It is now necessary to ask the same old question, how is this done? The pupils observe that there are certain important subjects, and that grouped around these are lesser ones, the latter being easily distinguished

from the others by their very apparent transitional nature. They seem to serve as connection between the more important subjects. The first part—as far as the double bar—of a number of sonatas should now be played until the pupils can observe that though the treatment varies there is a similarity in principle, a tendency to have main subjects with transitional passages, in some cases growing into importance so that they rival the main subjects both in length and in the attention they receive. This should be followed by playing the middle passage, or the fantasia part, of the same illustrations, the pupils observing how much freer is the employment of material here, resembling in some cases the polyphonic treatment. While in the first division there was a certain similarity in key treatment, the greater freedom in this part will be noted. Finally, in the last part of the same sonata movements, often called the recapitulation, the resemblance to the first part or exposition will be observed, as also the change of key to bring about symmetry, and the tendency to develop the final figure, so as to form a tailpiece, or Coda.

Such a comparison of movements is sufficient to establish the following ideas in connection with the sonata form: that the first part is an exposition of the material and requires close concentration if the rest of the work is to be intelligible; that this is followed by a second part which serves as a contrast to the first and last, and exhibits the greatest amount of freedom and variety; and finally, that the last part is a recapitulation of the first, but varies from it because it ends the work instead of leading into it. The

pupils realize as never before that a work taking ten or fifteen minutes to perform may, without the use of words or any other external aid to tell what it is about, still with all its variety give the impression of one complete whole. They see that this is brought about by a careful adjustment of parts to one another, and they feel the necessity for attentive listening to catch the composer's thought. A sonata of Beethoven demands as much attention as does a play of Shakespeare.

The great advantage of this attitude of mind will be apparent when one remembers that the ordinary listener thinks of music only as sensuous excitement and for this very reason fails to make the effort necessary for the enjoyment of its higher forms. Besides this advantage of mental attitude, there is another in the fact that the sonata form has dominated all great instrumental compositions, and that the ability to follow its structure is an aid in comprehending even the freer forms of modern composers. Therefore, the study of the sonata form is not an end in itself, but a means by the aid of which the pupil may learn to listen to music more intelligently.

THIRD STAGE: THE MUSICAL SENTENCE

The knowledge that the sonata contains expositions, fantasia, and recapitulation is of no value to the pupil if, when he hears a sonata, he is unable to distinguish the musical sentences that make up these parts. A student familiar with the theory that a drama should consist of five acts with the climax in the third will read one of Shake-

speare's plays with more intelligence than a person who knows nothing about the structural differences between a novel and a play; yet, after all, a play is appreciated through the grasping of each successive sentence, and no amount of theoretical knowledge with reference to the structure as a whole can compensate the person who does not feel the significance of the material as it is presented. Hence in music the primary aim is the recognition of the musical thought units, the sentences, if you please, of the story. It is not at all essential that the pupil be able to tell whether a given passage is the second subject in a Beethoven symphony or is a well-developed phrase in a transitional passage. It is well worth while, however, for him to hear the passage so that he recognizes its difference from, and likeness to, what precedes and follows. In this stage, therefore, after the pupils have some notion of the larger groupings and their relationship to one another in the sonata form, the rest of the time set aside for such work may well be devoted, not to an attempt at analyzing what they hear with reference to such formal groupings, but simply to hearing the subject-matter itself.

To illustrate the method which is used, let the reader hum the tune *Should Auld Acquaintance Be Forgot* as far as the words given, and with pencil in hand draw a horizontal line slowly while he sings, commencing with the second syllable. Then let him sing the next phrase in the same way, making a line under the first, and so on through the tune. Now by humming it through a second time and grouping these, it will be found that the eight

unite into groups of two, the second of each answering the first, and these pairs also group into two, thus dividing the tune into two halves the latter parts of which are similar; by noticing how they are alike or unlike, it is possible to name the parts for discussion and study.

Should auld acquaintance be forgot	}
And never brought to min'	
Should auld acquaintance be forgot	
And days o' auld lang syne	
For auld lang syne my dear	
For auld lang syne	
We'll take a cup o' kindness now	
For auld lang syne.	

The pupils are first given practice in this work through the use of folk songs; afterwards they take the simpler pieces of Schumann and Schubert until they can easily draw a line the whole length of each passage, the ends of the lines marking the important cadences, or points of division. Dance music is another symmetrical form in which the sentences can be traced with comparative ease.

After the power of listening to the thought has been established, comes the utilization of more complex material taken from the simpler forms of modern romantic music and sonatas, where the musical thought does not break up into similar rhythmic units. These may be main subjects, transitional passages, developed episodes, or the Coda. The passage should be played over a number of times until the pupils have mentally decided which they consider distinct passages or sentences.

After they have drawn the lines, they should compare or criticise one another's work. It will be found that hardly any two judgments agree, but this does not affect the value of the exercise. One student in listening to a large complex subject breaks it up into two or three parts, that is, he notices the differences; another who hears the same passage groups it all as one whole, his mind being attracted by the likenesses. Both are basing their judgments on real experience, and one is just as valuable as the other for developing ability for listening to music. From the point of view of the exercise it is not the aim that the passage should be named correctly as a whole, but that both the unity and the variety should be recognized. Drawing a line to mark a passage aids the memory in locating it and thus makes it possible to describe what one has heard.

It is true that such intensive intellectual effort interferes with the delicious reverie with which one likes to accompany music heard for enjoyment alone. It must be borne in mind, however, that the purpose of this work is to develop the power to grasp the content of the music and to appreciate the means employed in giving it effect. In this respect it differs from the ordinary process of listening, in the same way that the reading of poetry for the study of the thought and form differs from reading it for its rhythmical swing and sonorous tone quality. The first method is subsidiary and is justified by the fact that it increases one's power of complete æsthetic enjoyment.

The study of the sonata will naturally awaken, as in

the case of the polyphonic music, an interest in the composers and their times. The teacher may stimulate this interest by having the pupils prepare papers on the lives and important works of great masters, connecting this exercise as far as possible with their literary and historical studies. This work also will be aided by having the examples played,—if not by individuals, by instruments,—as was suggested for the previous study.

The extent of the ground to be covered should be decided not by the subject, but by the capacity and opportunity of the class. As far as the material is concerned, this work could be effectively carried on throughout the high school course. What is here attempted is merely to give the pupil an introduction to instrumental music so that he can take the fullest advantage of such musical opportunities as ordinarily fall to the lot of the average person.

CHAPTER XVIII

PLAN OF INSTRUCTION BY TOPICS

A PLAN for teaching a topic may have many divisions, but four essential processes will always be present. The first step is when the teacher thinks over the subject so as to have more clearly in mind just what she is going to teach. The second step is to think of the topics in the light of the probable experience that the pupils have had with reference to the subject. The interest with which they take it up, what they get out of it, will be pretty surely in proportion to what they already know concerning it.

In the first step, the teacher makes clear in her own mind what she wants to teach; she defines her aim, which grows largely out of the subject itself. In the second step, she defines the probable attitude of the pupils. This attitude will be the pupils' aim with reference to the subject resulting from their particular experience in relation to it.

The third step is a union of the first two. The problem is, how to realize the teacher's aim, given the pupils' experience. This step will require the thinking through of the lesson, bearing in mind the particular conditions under which it will have to be given. The new knowledge is welded with the experience of the pupil so that it becomes a part of him, his own experience, capable of serving as

the starting point for still further knowledge. As in all welding, this step requires that the edges shall be prepared for each other, free in this application from all thought obstructions, such as ambiguity or confusion.

The fourth step consists in testing the new knowledge; the teacher hardens, if you please, her weld, by plunging it into water. Is the union solid? Can the pupil employ, explain, and defend what he knows?

The fourth step may be very short in academic subjects if simply grasping the idea is all that is required; but in art study, especially in music, where a technical application of the idea is essential to give it value, this step may occupy many lesson periods in which the ideas presented are applied over and over until skill is gained in their use.

Thus the lesson plan principle here suggested must not be thought of under the limitations of a twenty-minute period; yet the ideas must be so closely presented that the relation of the various stages to each other is not lost. Lesson plans presenting a new principle will not be frequent in music. There is not a large mass of material to be presented to the students, as in geography or history. There is, on the other hand, an infinite application of a few important musical principles. These are presented in the stages and steps of the work of the grades.

After the idea of one of these principles has been carefully presented, covering in some cases a number of twenty-minute periods in succession, there may follow weeks when the work is simply the development of skill in the application of the principle.

Let us take the first steps in rhythmic notation as a topic to illustrate our point. This is described under the third stage of the second year work (Chapter VII). The teacher will begin with the first step of the lesson scheme: What ideas are implied in the commencement of rhythmic notation? These are, first, various tone lengths. She must select a number of these, sufficient to illustrate the principle, and yet not so many as to make the subject complex. Let us say that she decides to use the half, quarter, and eighth notes for her illustrations. But half, quarter, and eighth mean nothing unless they are realized in connection with time values expressed in pulses, e. g., a pint, quart, or gallon of milk means nothing unless there is some idea as to what the relative capacities of these measures are in relation to the person's own experience. Hence a second idea must be added,—the relation of halves, quarters, and eighths to each other, i. e., the pulse idea. It is the union of these two, duration and pulsation, which produces the idea that notation represents. The teacher thinks out how the entrance, grouping, and accents of tones make the pulse evident, at the same time that the pulse makes evident the nature of their relative duration.

She now takes up the second step in the lesson scheme and asks herself, "What experiences have these second year children had with reference to tone duration and pulsation that will enable me to combine them so as to reach a new principle?" The children in the first year have enjoyed walking, marching, and swaying, in con-

nection with music. They have done this at first for the pleasure of it. What a strong, lasting pleasure this is, we realize when we think that it commences with the gentle rocking of the mother's arm, the "Trot, trot to Boston," of the father's knee, and that it is still present when the gray head keeps time by swaying to the music of band or orchestra.

This first enjoyment of moving to music has been guided according to the second and third principles given in Chapter I, i. e., the pulse experience has been organized so that the unmusical child has become conscious of it, and actions like marking time with the foot and swinging circles with the hand have made it possible for the child of average musical ability to conceive of the rhythmic feature of music in the total musical impression. Similarly these same principles have been applied in the previous work to the idea of duration. The children have enjoyed the fun of telling what they were thinking of by clapping the tones; *Yankee Doodle* goes so differently from *America*. They have gone one step further. They have differentiated between those two modes of action, not only by making the motion for the pulsation idea different from that for duration, but also by picturing one with circles and vertical lines and the other with dashes of various lengths. That is, the children have ideas with reference to pulsation and duration as separate phenomena; they have experienced them in their music so that they can pick them out from simple songs, and they can act and picture them separately. This completes the teacher's re-

view of the children's experience, which constitutes her second step.

The teacher is now ready to think through her third step, which will be to unite what her pupils have in their experience—what they know—with what she wishes to teach them; in this case, the ability to form ideas from halves, quarters, and eighth notes written on the board. In thinking out this step, she will imagine herself before her class actually giving the work. We will therefore describe it as taking place.

Her first act will be to draw on the board a group of five lines resembling the staff. This the children are familiar with, for they have put diagonal dashes on it to represent the tones. Instead of such dashes the teacher might write a little motif consisting of a quarter, two eighths, and a half tone on the same line. She will precede the half notes by a vertical bar, and follow it by two bars side by side and place at the beginning the time signature two-four. The children's curiosity is awakened by the new signs. The teacher tells them that these show how music goes and that she is to teach them to-day just how this is done. Since the children are familiar with pitch movement as well as with rhythmic movement, she will have to devise some way to make them realize which kind of musical "go" these signs represent. She hums two measures of *Star Spangled Banner*, and asks the children to describe the two ways in which it goes. She tells them that the notes she has written represent that form of movement which they act by swinging and clapping, and picture by circles

and dashes. In order to show them how the signs represent this, she starts by asking them to sing and picture some familiar songs, such as *Hot Cross Buns* and *Ding Dong Bell*. The children make two pictures for each song: one with circles to mark the pulse, the other with dashes to mark the duration.

The teacher now thinks over how she shall unite these two ideas in order to show the relationship between them. She takes up the duration problem first, and gets them to realize how the tones in the two songs vary in length: they notice that there is a medium length, a longer and a shorter one, making three durations in all.

The teacher's next problem is to awaken in the children the need of some standard by which to measure these. She may do this by placing three books before them. The children realize that there are differences in sizes as there are in tone lengths. With the books they can tell what the exact difference is by using a ruler. One book is, say, eight inches in length, the second, four. The essential thing in the measuring process is that there be a recurring unit by means of which the various objects can be compared in terms of which their differences can be stated, such as inches in the case of the ruler and books. The teacher's aim is to make the children realize that in order to measure the differences in tones, they need something like a ruler, except that the things marked off must be equal lengths in time and not in distance. Turning to the board she has the children sing and act what is pictured. They readily discover that in each tune the pulses and the

circles recur regularly. Then by means of these they can measure. How shall it be applied? In the same way as the size of the book was discovered by bringing the book and the ruler together. They try applying their pulse ruler vocally. She will sing the first three words of *Hot Cross Buns* and ask children to measure with the circles and see whether the word "buns" is like "hot cross" in length. She will also reverse this process and ask the children to sing *Ding Dong Bell* while she swings the circles. The children discover that not only is the third tone in both songs just as long as the two preceding, but by continuing these songs they come to passages where two tones instead of one come on a circle. Thus they find that they can measure three kinds of lengths: one going with the pulse, one requiring two pulses, and a short kind of which it takes two even tones to fill up a pulse. What has been united in tone and action will also be united in tone and picture. This picture consists of circles with vertical lines just before, and extending above, each large circle. The resulting even space above the circles is filled with the dashes representing the tones, the length of the dash representing one pulse tone being made the width of the circle, that of the two pulse tone being two circles; thus the relation of duration to pulse is visualized in such a close way that the interrelation of the tones represented is not lost.

The teacher now plans to make direct connection between the signs she placed on the board at the beginning of the lesson and the means for tone measurement that

she has developed. She places the quarter note on the dash that represents a single circle, the half note on that representing two circles, and the eighth notes where two dashes come to a circle. She tells the children that musicians use these signs instead of pictures, much as they themselves use the word *dog* to save drawing a picture of the animal. So the musician draws a vertical line where each strong pulse should come. Each line drawn across the staff on the blackboard means that the strong pulse directly follows it.

She will now have to bring out the idea that putting in the vertical line is not sufficient to give the complete pulse idea, since the number of weak pulses which fall between two strong pulses varies with different tunes: some have only one weak pulse, some have several. The circles represent the total number of pulses, but the vertical lines represent only the strong pulses. In order to indicate both the strong and the weak pulses between two vertical lines, the upper figure is placed at the beginning: in this case the two shows that there are two pulses between the vertical lines.

She will next state that musicians do not always use the same length of note to represent a pulse. While generally it is a quarter note, often they use an eighth note, and sometimes a half note. To show which note they wish to represent the circle, they put another number under the first: in the motif on the board the figure four represents the circle and means that each pulse is represented by a quarter note.

The teacher has now thought out the specific things she wishes to teach, and she has planned to combine these with what the children already know, in such a way that they will have a clearly defined new principle: in this case that tones may be definitely measured, and a specific form of measurement has been connected with the specific signs written on the board, as quarter, half, and eighth notes with the vertical lines and fractional figures for defining the pulses. She is now ready for the fourth step, in which she will test both the accuracy of the idea and the strength of its association with its symbols. She will plan to sing several short phrases in which occur the durations being studied. These the children name with the aid of singing and clapping where necessary. A second plan is to sing extremely simple combinations and have the children write them down in musical notations. When the teacher has convinced herself that the idea and the association are well established, she may present a third group of exercises. For this she may write the same durations in short motifs of a few tones, first on the same pitch, and then in the simplest varying tones, and have the children sing them as complete units without hesitation. Obviously, the fourth step is one that will cover a good many lessons; in fact, the principles implied will be in constant use every time the pupils read from notation. However, each new step in the learning of rhythm notation from now on, instead of being, as is very frequently the case, a new and unrelated fact to be mastered and remembered, is simply a further application of principles already familiar.

What is there more deadening than to repeat the same explanations year after year, when, if a principle were once understood, it would so germinate in the pupil's mind that he would be more than ready to meet the teacher halfway? Too often in the search for quick results, the development of principle is forgotten. The teacher puts the four notes on the board, says whole, half, quarter, and eighth, and illustrates by drawing a circle. In order to give it vivid interest, she may call it a pie. She divides it vertically in two. The whole pie has become two half pies, and, as if the children were fools, she asks how many half pies in a whole one, and they respond in joyous unison, two. Then she divides it again horizontally; the familiar four quartered pie is before their eyes. The teacher asks the perfectly obvious question, how many quarters in a whole? How many in a half? The united shout of the children shows more enthusiasm than thought. Now by diagonal lines the pie is cut into eighths. These fractions are connected with the notation, and we have apparently all the requirements of a good lesson,—a great deal of interest, concrete illustration, close application, and yet the vital thing to be taught has not been touched. Arrange in a musical passage these notes of which the children tell the names so glibly, and the children might go through it if the teacher sang with them, beating the pulses strongly on the table; but let there be a variation in the passage, and let the children be asked to do it individually, or even collectively, without the aid of the teacher, and they would look at her in surprise, showing that she was asking from

them something of which they had not the slightest conception.

The topic chosen for illustrating how a teacher should prepare for her lesson was purposely selected from the structural elements in music; for on the structural side comes the greatest difficulty in teaching. Pitch relations and duration values can be presented with their notation in such a formal way that they cease to be real things and amount only to verbal distinctions, lacking the vitalizing influence of experience. While the danger of losing connection with experience is present in all subjects, it is especially present in teaching the structure of music. Children readily produce pitch, duration, and pulse relationships in their songs, but since they are not conscious of these relationships as such, when we begin to talk about them, it is absolutely essential that the experience for which the words stand be also clear in their consciousness. Hence the stress laid upon the development of the necessary experience, not only in the plan of the lesson by topic above suggested, but also throughout the entire book.

While, in planning the lesson, the structural element is the most difficult to manage, the same principle will be applied to the interpretative ideas. These can be taught with comparative ease, for when a child changes the quality of his voice or the quantity of the tone that he employs, the rate of movement or articulation, he is distinctly conscious of how these particular changes affect the expression of the song. In other words, the constitutive ideas of interpretation are more readily connected with the

experience that brings them into consciousness than are structural ideas.

A brief illustration will show how the same planning by topic can be applied to interpretative work. Let us say, for instance, that Nevin's *Wind Song* is taken. The tripping movement of the first part and the imitative refrain of the wind at the end, these the teacher decides she will use for drill in clear articulation, the production of a good quality of tone, and practice in making a good, even crescendo and diminuendo. This is her first step. She next thinks over what probable experience the children have had both with wind and with songs in which the wind ideas have been expressed. She then passes to the third step, and thinks through the way she will bring out the clear articulation of the first part, and the imitation of the wind sound in the last part, due attention being given to position, good breath, and flexible jaw, the leading of the children to recall how the wind grows louder and softer as they have heard it, the forward placing of the tone to make it soft and at the same time resonant: in short, all the material will be passed over in review in this third step. She will then probably select some songs the pupils already know, and will see whether they can apply the newly acquired observation and skill to a better rendering of their old favorites, thus completing her fourth step.

If the importance and fundamental nature of what is accomplished by the longer method be borne in mind, the time and work required to think out what such a planning needs will not be considered too much. The experienced

teacher will go through these four steps in the preparation of her plan almost simultaneously. Long practice has developed the technique of her art. But to establish such a technique it is essential to break up what is done into the parts that constitute it, and practice these simplified parts until they can be accomplished readily and with ease. In the complicated processes that go on in a lesson, the inexperienced teacher who attempts to do everything at once, will form habits involving confusion of thought and false relationship which will make it more and more impossible to gain the necessary technique.

In this chapter on the lesson plan we have attempted, first, to illustrate the steps in the development of a thought with reference to actual lessons given; and second, to indicate how this thought is related to the larger principles in accordance with which the material has been arranged and work suggested in this book.

CHAPTER XIX

THE BROAD AND THE NARROW VIEW OF EDUCATION IN RELATION TO MUSIC

THE narrow view of music teaching produces two distinct types of work. The first emphasizes the intellectual element, and makes sight singing its goal. It has two advantages. The work lends itself to definite measurement; written exercises and singing tests show what it accomplishes; the world's coarse thumb and finger can easily plumb its results. It gets these results by utilizing the formal methods, and so is dear to the hearts of many teachers in systematized schools. It places its emphasis upon the eye rather than upon the ear; hence a larger number of the teachers of general subjects are able by its means to get results. This in itself would be of greatest importance if the results attained could be proved to have musical value in after life.

✓ The second type, which emphasizes the emotional element, though diametrically opposed to that just described, is classified under the narrow view because it also is impatient to get results. It asks, "Why all this harrowing and preparation for work? The pupils are already overstimulated to think. We want them to feel. Let us

gather all the honey of feeling from the flowers of song, and trust to Nature for providing the blossoms." Supporters of this view are not merely those temperamentally emotional, but also philosophers and leaders of educational thought, who, feeling the significance and value of music and realizing how much it means to society, naturally think that the time spent in schools on music should be taken up with songs that will inculcate friendship, love of home, love of nature, of one's country, and of God. When the advocates of this type see the entire time of the singing period taken up with the practicing of scales and the other machinery of sight singing, and observe that the song material used is vapid, both musically and poetically, written down to the children in order to enable them to read the music, the song being treated as an exercise made interesting, they are naturally disgusted with the whole American effort at sight singing, and say, "Away with it all. Let us do as they do very largely in Germany. Let the teacher with violin in hand, lead the children, thus reducing the mental effort on their part to simple imitation and placing the whole emphasis on the emotional side."

They make the mistake, however, of valuing music only as a means. They fail to recognize that, being an art, it has beauty for its goal, and that beauty, like truth, must be sought primarily for its own sake. One who seeks beauty because it is good for his health or his morals has not the attitude towards it that will enable him to grasp it. For, however highly we may regard the by-products of artistic activity, art that is pursued for the by-products

fails, because it ceases to be art. It is like the picture or the poem that, masquerading under the lion's skin of art, attempts to inculcate morals, love of country, or religion; sooner or later the unfortunate voice betrays the imposture. There are those who feel that as long as the imposition is not recognized the end justifies the means; but they fail to realize that the means become abortive because the true nature of art has been violated, so that it cannot exercise its forceful influence. Hence we fail, both of our ethical and artistic results.

Not only this, but this type of the narrow view, by seeing in art only its emotional worth, fails to recognize the necessity for the intellectual discipline that its genuine appreciation demands. Hence, those who hold it are impatient with any musical work that is not constantly bubbling with emotional fervor. They see no use in the concentrated effort, resembling that required in mathematics, which is so often demanded in a complete realization of a work of art.

A third objection to this type is that in emphasizing the social and collective aspect requiring expression, the field is narrowed and the motive weakened. With reference to the former, while collective singing has value through its intensity, there is much less opportunity for its exercise than through those forms of musical expression that we utilize simply by hearing, very largely in the field of instrumental music. While the ear training that results develops further ability for the same kind of activity, it does not necessarily prepare one for instrumental forms of

expression. There are those who enjoy singing in choruses, but to whom instrumental music is meaningless—a good example of the modern psychological view that preparation in one form of activity does not necessarily lead to the appreciation of an allied form, even though it be closely related.

Perhaps the most serious drawback is that it weakens the motive for musical activity through the disregard of the individual point of view. The individual sings patriotic or religious songs, not because he values the social worth of the emotions they awaken, but primarily because he loves to sing. When man is stirred with patriotic fervor, either in time of war or by some eloquent address, or under any stimulating social feeling, the social song comes to the front and is sung with vigor and enjoyment; but the average prosaic life does not offer sufficient opportunities for such expression. In an ordinary state of mind, a person will sing a patriotic or religious song for the attractiveness there is in the song; in other words, for what he feels is its beauty. The emotional type of narrow view, by disregarding the training in musicianship that will prepare the individual to see the beauty in music independently of all extraneous influences, destroys the strongest motive for musical expression and, as we have already said, defeats its own end.

Both forms of the narrow view emphasize important elements in music teaching. They stand in the way of a more comprehensive plan because of the truth they contain. It is right that early and definite results should be sought.

The reputation both of the teacher and of the school system are largely judged by what they immediately accomplish. It requires self-restraint and discipline for the farmer to leave his field fallow when he might be getting crops. It takes a broad view to plow deep and fertilize well when the immediate harvest can be got with less effort. With the pressure for results upon her the teacher needs moral courage to allow time for preparing the pupils' minds, when by appealing directly to memory she can have not only the forms of knowledge repeated to her, but the processes as well, and so cleverly that only the most careful observer can detect the lack of genuine understanding. These quick responses are the product not of thought but of imitation. It is because we are deceived as to the results of the narrow view that it is often considered more effective than the broad, comprehensive treatment.

It is not only the intellectual and the emotional aspects of the narrow view that are obstacles to the successful carrying out of more comprehensive schemes of music teaching. There are practical objections. The broader view demands special training on the part of the teacher and the exercise of the mind in discrimination through the use of the ear, an organ almost never used for discriminative work outside of music and the incidental phonics work in English. When we consider how little training in either of these the average teacher gets, it is not surprising that when she tries to deal with tonal ideas she should feel entirely unable to cope with the problem, like the proverbial hen with her brood of ducklings. Lessening this demand

for special training is the fact that when music is taught in a truly educational way, it can easily be related to other forms of educational work carried on in a similar spirit. The teacher who for nature study and English, requires individual observation and the formulation and expression of what is observed in cogent and effective manner, who makes all the geography, arithmetic, and writing grow out of the experiences of a pupil's daily life and knows how to make her work significant, will have little trouble in teaching music along the broad view, even though her musical training may not be extensive. It is certainly the experience of all supervisors that the teacher working along true educational lines will get better results in music than the merely musical teacher who, unable to analyze her own processes, gets only thoughtless and imitative results by leading the pupils with her voice.

Another objection besides the training required, is that the carrying out of the broad view does demand time. Music in many schools at present fails to get the time it needs, because, under the control of the narrow view it aims only at immediate results, and so does not exercise that lasting influence upon life which would justify those who arrange school programmes in giving it more time. If society and school authorities realized how much more the broad view would make possible of accomplishment, there would be no difficulty in getting either the training or the time essential for the work.

The broad view not only attains all that the narrow view aims to accomplish, but adds two distinctive features: in-

individual initiative and the communication of feeling. The development of individual initiative renders it possible not only for the act of producing music, but for the far more frequent act of hearing music, to involve an active coöperation of both the thought and the imagination of the pupil. By demanding thought and imagination, music causes the self to take such a real part in what is heard that throughout life a continual development ever widens and deepens the power for joyous experience.

The communication of feeling is brought about through the development of musical ideas which charge the sensuous beauty of music with the expressive qualities of language, not duplicating language where it is effective, but conveying the expression where language fails. When the reader considers how vital is language in differentiating man from the brute, he will feel the importance of this subtler language, which has the power of carrying man far beyond the limitations of speech. In terms of the aim of artistic education stated in the first chapter: the broad view represents an education through music that quickens perception, clarifies feeling, and stimulates initiative for the beautiful.

